MARTHA'S RULE page 226 **MOUNJARO ACCESS** page 228 **AI OVERDIAGNOSIS** page 230

Children offered NHS chickenpox jab

Children in England will be offered a chickenpox vaccine on the NHS for the first time from January, the government has announced.

GPs will offer eligible children vaccination against varicella as part of the routine childhood schedule, using a combined measles, mumps, rubella, and varicella (MMRV) vaccine. Currently, the varicella vaccine is available only privately in England, costing around £150 for a two dose course.

The Department of Health and Social Care said the move will help protect children from serious complications of chickenpox, such as bacterial infections and brain and lung inflammation. The jab is expected to save the NHS £15m a year in treatment costs, the department added.

Other countries that offer MMRV, such as Canada, Germany, and the US, have seen substantial falls in case numbers.

The decision followed a recommendation from the Joint Committee on Vaccination and Immunisation in 2023, in response to evidence of the impact of severe cases on children's health and the associated costs.

Gayatri Amirthalingam, deputy director of immunisation at the UK Health Security Agency, said, "Most parents probably consider chickenpox to be a common and mild illness, but for some babies, young children, and even adults, chickenpox can be serious, leading to hospital admission. Tragically, while rare, it can also be fatal.

"We now have extensive experience from a number of countries showing the vaccine has a good safety record and is highly effective."

Varicella is the first addition to the routine childhood vaccination programme since the meningococcal group B vaccine in 2015.

The health department said upcoming clinical guidance would set out which age groups will get the vaccine and when, to ensure the most effective protection. Eligibility will be based on a child's age when the programme starts in January 2026, with parents to be contacted by their GP surgery to arrange an appointment, if appropriate.

Helen Stewart, officer for health improvement at the Royal College of Paediatrics and Child Health, said the focus must now shift to implementation. "Government needs to invest in and expand vaccination services, undertake strong public information campaigns, and ensure the right health workforce is in place so everyone can easily access these crucial vaccination services," she said.

Gareth Iacobucci, *The BMJ*

Cite this as: *BMJ* 2025;390:r1828

Countries that added the varicella vaccine to the MMR jab saw falls in cases and admissions to hospital

LATEST ONLINE

- Baby whose mother wasn't vaccinated dies from whooping cough
- US approves Alzheimer's drug lecanemab for use at home
- GMC is urged to act after doctor repeats misinformation about vaccination link to cancer in royal family

MEDICAL NEWS

Martha's rule is rolled out to all hospitals in England

Martha's rule, the scheme allowing patients and families to get an urgent second opinion if they are concerned about their own or a loved one's care, will be expanded to every acute care hospital in England.

The programme is named after 13 year old Martha Mills (left), who died in an NHS hospital in 2021 from sepsis after being admitted with a pancreatic injury sustained when she fell off her bike. During her care, her family's concerns about her deteriorating condition were not responded to. An inquest later concluded that Martha would probably have survived had she been moved to intensive care earlier.

Last year NHS England launched a pilot of the scheme in 143 hospitals, after a campaign by Martha's parents, Merope Mills and Paul Laity.

Early data showed that as a result of the scheme dozens of patients received critical interventions such as urgent transfers to intensive care, being given oxygen, or receiving antibiotics.

New data show that 241 calls had led to potentially lifesaving interventions being triggered since the scheme was launched.

Between September 2024 and June 2025 a total of 4906 Martha's rule calls were made to escalate concerns about care. Of these, around 15% (720) led to changes in care such as receiving a new medication, 17% (794) led to clinical concerns such as medication or investigation delays being looked into, and 21% (1030) helped to resolve communication and discharge planning issues, NHS England said.

Gareth Iacobucci, *The BMJ* Cite this as: *BMJ* 2025;390:r1867

Resident doctors

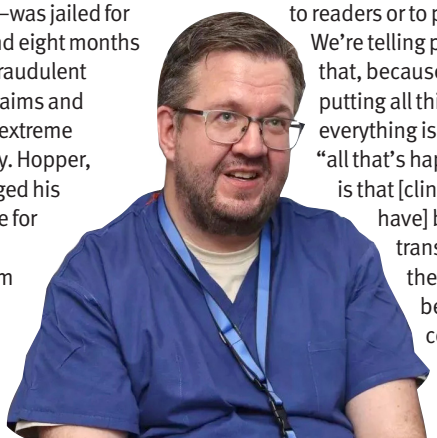
Plan issued to improve "unacceptable" conditions

NHS England issued a 10 point plan to improve the working lives of 75 000 resident doctors who form the "backbone" of the health service. The plan, sent to NHS trusts on 29 August, emphasised the importance of fixing "unacceptable working practices" that younger doctors too often faced. These included "basic issues" such as payroll errors, poor rota management, lack of rest facilities and hot food, and unnecessarily repeating training.

Legal news

Surgeon jailed for fraud over his amputations

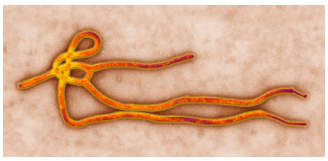
Neil Hopper, a former NHS consultant vascular surgeon who inflicted injuries on himself—causing his legs to be amputated—was jailed for two years and eight months for making fraudulent insurance claims and possessing extreme pornography. Hopper, 49, submerged his feet in dry ice for eight hours, causing them to become "unviable," and he underwent below-the-knee amputations in 2019, Truro Crown Court heard. He pleaded guilty to two counts of fraud by false misrepresentation over claims that his injuries were caused by illness. Hopper obtained more than £466 000 from two insurance policies after telling insurers that he had had septicaemia.



Conflicts of interest

Doctors' declarations are "fig leaf," expert warns

How doctors declare conflicts of interest is ineffective and helps industry find researchers to influence, a senior GP academic warns. In a speech at the 2025 Preventing Overdiagnosis conference in Oxford, Margaret McCartney—a GP, writer, and senior clinical lecturer at the University of St Andrews—said, "We're putting the burden on to readers or to patients. We're telling people that, because we're putting all this effort in, everything is fine." But "all that's happened is that [clinicians have] been transparent—they haven't become less conflicted."



Ebola

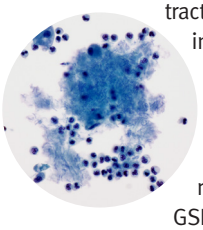
WHO confirms 15 dead in new DRC outbreak

At least 15 people, including four healthcare workers, have died from Ebola in the Democratic Republic of the Congo, the World Health Organization said on 4 September as it officially declared an outbreak. At least 28 people have been infected in the remote province of Kasai, marking the country's first outbreak in three years and the first in Kasai since 2008. WHO dispatched healthcare specialists to the Bulape and Mweka regions in Kasai to help local teams contain the outbreaks.

Assisted dying

Law change will "add pressure" on NHS

Assisted dying safely will require major planning, infrastructure, and investment or will become yet another service that people struggle to get, experts warned. The Nuffield Trust said evidence from 15 jurisdictions where assisted dying is legal showed policy makers often underestimated the extra capacity needed to set up and run such a service effectively. In the UK, where end-of-life care was "patchy," assisted dying would place "added pressure" on NHS, hospice, and social care capacity, said the think tank, which takes a neutral stance on the legalisation.



UTIs

New antibiotic for women and girls approved in UK

MHRA, the UK drugs regulator, approved a new oral antibiotic pill to treat uncomplicated urinary tract infections (UTIs) in women and girls aged 12 or older who weigh at least 40 kg. Gepotidacin (Blujepa, manufactured by GSK) is the first new oral antibiotic for UTIs approved in the UK in nearly 30 years. Julian Beach, an interim executive director at the MHRA, said, "The antibiotic's targeted mechanism of action makes it more difficult for bacteria to develop treatment resistance—a crucial factor, as drug resistant bacteria are increasingly on the rise globally."

IN BRIEF

Energy drinks ban

Experts welcome move but question obesity claims

Health experts welcomed government plans to ban the sale of high caffeine "energy" drinks to under 16s in England. Subject to consultation, it will become illegal for retailers to sell drinks containing more than 150 mg/L of caffeine to anyone under 16, excluding tea or coffee. But Tom Sanders of King's College London said the government's claim the move could prevent obesity in 40 000 children "seems scientifically unfounded." He added, "There seems to be some confusion regarding the term 'high energy' drinks with drinks high in food energy [calories]."

Proposal will ban sales of high caffeine drinks to under 16s

Postnatal depression

First pill treatment approved in UK

The first oral drug to treat moderate or severe postnatal depression was approved for use in the UK by the MHRA. Zuranolone (Zurzuvae, manufactured by the US company Biogen) is a neuroactive steroid taken as a capsule in the evening with a fatty meal, for 14 days. The approval follows two placebo controlled clinical trials, in which groups taking zuranolone showed significant improvement in symptoms over the placebo group.

Doctors' disability

Staff feel bullied by colleagues, BMA reports

Doctors with disabilities or neurodivergent conditions are bullied by colleagues at work and struggle to get support from the NHS, a BMA report warned. Interim results of a BMA survey of 801 doctors and medical students with a disability or a neurodivergent condition such as autism or ADHD showed 34% had experienced bullying or harassment related to their disability or long term health condition at their latest place of work or study.

Physician assistants

Court case against GMC is dismissed

The GMC's refusal to set a national scope of practice or to produce standards for physician assistants (PAs) and anaesthesia assistants (AAs) was not unlawful, the High Court ruled. A legal challenge was brought by Anaesthetists United and the parents of Emily Chesterton, a patient who died after two appointments with a PA she believed was a GP.

Learning disability

Adults die 20 years earlier than general public

An NHS England review found that people with learning disabilities died 19.5 years younger on average in 2023. While their overall life expectancy improved slightly (from 62.1 years in 2021 to 62.5 in 2023), 39% of deaths of people with learning disabilities were classified as avoidable in 2023, compared with 21.5% in the general population.

Cite this as: *BMJ* 2025;390:r1892

MENTAL HEALTH

Just under

1.1 billion

people have mental health conditions, and countries' efforts to treat them are "insufficient and inadequate"

[WHO's World Mental Health Today report]

SIXTY SECONDS ON . . . ORGAN TRANSPLANTS FOR IMMORTALITY

WHO WANTS TO LIVE FOREVER?

That's the question that unexpectedly arose on 3 September when Chinese and Russian presidents Xi Jinping and Vladimir Putin had a conflab at a military parade in Beijing.

THIS HAS SERIOUS JAMES BOND VIBES

It was—we think—light hearted. The pair (below) reportedly discussed how organ transplants might lead to immortality on a hot mic at the parade, which was staged to mark the 80th anniversary of the end of the second world war.

IM(MORTAL) COMBAT?

No, this was very much small talk territory. Putin's interpreter could be heard saying in Mandarin that with the development of biotechnology "human organs can be continuously transplanted, and people can live younger and younger, and even achieve immortality."

THE PICTURE OF VLADIMIR PUTIN?

Xi's reported response, delivered through his translator, was to highlight predictions that "this century there's a chance of also living to 150."

THAT'S A PRETTY GOOD INNINGS

Indeed. And with medical and technological advancements accelerating more rapidly by the day, transplanted organs are lasting longer than they once did. NHS Blood and Transplant says some patients have received a kidney that has kept working for more than 40 years.

"YOU ONLY LIVE TWICE, MR BOND"

I don't think they got on to reincarnation. But they may well have been referencing concepts like rejection free organs that use genetically altered pigs as donors, or the growth of organs using a patient's own cells, both of which are being tested.

SO JUST AN INNOCENT CHAT?

Seemingly. But it's worth mentioning that Beijing has faced criticism for its organ donation practices. In 2019 an informal tribunal in London concluded that mass forced harvesting of prisoners' organs had occurred in China and constituted crimes against humanity under international law. Rejecting the findings, the Chinese government said it followed World Health Organization transplantation guidance.

Gareth Iacobucci, *The BMJ*

Cite this as: *BMJ* 2025;390:r1884

EXCLUSIVE

MOUNJARO: **Less than half of England has NHS access to jab months after roll-out, distressing patients and their GPs**

Most patients in England's NHS commissioning areas can't access tirzepatide (sold as Mounjaro) through general practices, despite the NHS roll-out of the weight loss jab starting over two months ago, *The BMJ* can disclose.

Just 18 of England's 42 integrated care boards (ICBs) confirmed that they had started prescribing tirzepatide in line with NHS England's primary care roll-out plan.

The data, obtained through a freedom of information (FOI) request, also show that, despite NHS England saying it expects 70% of eligible patients to come forward for treatment, just nine ICBs had been allocated enough NHS funding to cover 70%.

Experts warned that the lack of funding, together with poor communication to the public about the roll-out, was resulting in "distress and uncertainty both in patients and primary care" and had left ICBs in a difficult financial situation.

A total of 40 of the 42 ICBs responded to *The BMJ's* freedom of information request.

Four ICBs reported that the NHS funding they had received covered just 25% or less of their eligible patients, with Coventry and Warwickshire faring the worst. That ICB told *The BMJ* it had received funding to cover just 376 patients, despite identifying 1795 eligible patients in the first year, meaning it can cover only 21% of its patients.

Because of the large number of people who could benefit from tirzepatide—an estimated 3.4 million—and the drug's price, NHS England and its spending watchdog, the National Institute for Health and Care Excellence (NICE), agreed that the injections would be rolled out in phases over 12 years.

The roll-out began on 23 June.

Tightening criteria

An estimated 220 000 patients are expected to be eligible for the treatment in the first three years.

Eligible patients in the first year (2025-26) are those with a BMI ≥40 and at least four comorbidities among hypertension, dyslipidaemia, obstructive sleep apnoea, cardiovascular disease, and type 2 diabetes.

MARK THOMAS

Five ICBs have said they were already considering further tightening the criteria for prescribing tirzepatide or rationing the treatment.

The funding shortfall comes at a time when ICBs have been put under huge financial pressure by the government's announcement that they must halve their running costs by the end of 2025.

Birmingham and Solihull ICB said it received funding to cover just 52% of its eligible patients (477 of 912) and emphasised that NHS England had been "clear that there is no additional funding," with any additional costs incurred—such as from treating more patients—having to come from other parts of its budget.

"Difficult decisions are having to be made to ensure money is spent in the most effective and efficient way possible and for the greatest patient benefit," the ICB said. "It also means that the NHS locally in Birmingham and Solihull does not have the means to plug gaps to fund drugs or treatment when central funding allocations have fallen short."

The ICB has not yet started prescribing tirzepatide through general practice but said it hopes to do so this autumn.

Jonathan Hazlehurst, consultant endocrinologist and academic clinical lecturer at the University of Birmingham, said that although the central funding from NHS England was "extremely welcome" the roll-out had so far been "significantly underfunded."

He said, "That clearly drives up distress and uncertainty both in patients and primary care and runs the risk of inequity in access to treatment, and that's my biggest concern."

Responding to the findings, an NHS England spokesperson said, "The NHS is fully supporting the phased roll-out of tirzepatide for eligible patients, having issued guidance in line with the NICE guidance, and provided funding to local ICBs to support patient care in March 2025.

"These represent brand new services in primary care that are being established and scaled up over time, starting with those who are in the most need—and in the meantime eligible patients can get weight loss support from a range of other services, including the NHS Digital weight management programme."

GPs inundated with requests

As ICBs struggle to balance patient demand with the funding shortfall, GPs have been left to communicate the situation to patients.

In West Yorkshire, where the ICB said it had received funding to cover just 995 of its 3385 eligible patients (29%), one general practice has told patients that despite "recent media announcements" suggesting it can prescribe tirzepatide it was currently not able to do so as the local service was not yet running.

Similar notices urging patients not to contact their GPs as they cannot provide these drugs have been posted by practices around the country, including Suffolk and North East Essex, where funding for just 25% of eligible patients (250 of 1000) has been provided.

Just one of London's five ICBs, South West

London, has started prescribing tirzepatide. Tamara Hibbert, chair of Newham Local Medical Committee, in east London, said, "While there is significant potential for these drugs to benefit patients, the messaging needs to be clear about what they can expect in terms of the criteria for accessing them on the NHS and the funding available at an ICB level.

"It can't just fall on the shoulders of GP practices to explain the limitations on their availability to an expectant public."

Hibbert added that there was no dedicated funding to support GPs to monitor and support these patients.

"We really want to help our patients to avoid the health conditions associated with being overweight, but we are doing our best within an environment of tight funding and an overstretched workforce," she said.

Ellen Welch, co-chair of the advocacy group Doctors' Association UK, said, "These figures confirm the fear that the roll-out is not fit for purpose. There is a huge discrepancy between national messaging and what patients are actually being delivered on a local level.

"As a GP I get several queries a week from patients asking for GLP-1 RAs [glucagon-like peptide-1 receptor agonists] to be prescribed for weight loss, and very few meet the strict NHS prescribing criteria."

Welch added that the news that the price of tirzepatide through private providers was set to rise by 170%, after a complaint by US president Donald Trump, was "sure to lead many more patients to the door of their GP surgeries, where they will sadly be met with an inadequate service, even if they do meet the narrow criteria."

Knock-on effect

The funding shortfall in the first year does not bode well for the 11 years ahead.

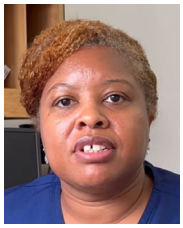
Hazlehurst warned that the underfunding would have a knock-on effect for the following years, especially as more people will become eligible.

He explained, "Some of those year 1 eligible patients potentially won't start treatment until year 2 or 3. So then what do you do, come year 2, when that eligibility criteria relaxes and you're clearly still playing catch-up?"

While NHS England expects to cover 220 000 patients in the first three years of the tirzepatide roll-out, data indicate that it could fall far short of this ambition.

For this first year, just 14 417 patients are being covered by NHS England's funding across the 28 ICBs that provided this information.

The commissioning model has set up a postcode lottery of obesity care access
Nicola Heslehurst



It can't just fall on the shoulders of GP practices to explain limited availability to expectant patients
Tamara Hibbert

In a separate allocation document, obtained by Hazlehurst through an FOI request and seen by *The BMJ*, NHS England suggested that its funding will cover 22 400 patients in this first year. This leaves ICBs and GPs with an uphill battle to cover nearly 200 000 patients in the next two years.

Hazlehurst said, "NHS England is talking about treating 220 000 patients in the first three years, but we can see that the initial funding for year 1 clearly only covers approximately 10% of that."

He emphasised that the lack of communication to the public about the difficulty in rolling out and funding tirzepatide was a major problem. "If you're going to have very strict [prescribing] rules, whether they're right or wrong, you have to fund those very strict rules and have absolute clarity so patients and GPs know where they're at, and that's what we're lacking at the moment.

"That's my major criticism of NHS England. I think patients need to be treated with absolute respect and absolute clarity. And I think if we say that there is only money to treat 22 000 patients in year 1, then why is that number not in the public domain?"

Hazlehurst also warned that some patients who would "benefit from really urgent and immediate treatment" with tirzepatide were not considered a priority.

"For example, patients needing to lose weight to access cancer diagnostics or treatment, or perhaps transplantation or perhaps orthopaedic surgery.

"They're simply not included in the interim commissioning guidance. So there are people who would really benefit from treatment right now but just don't have a means to access NHS based treatment."

The figures confirm the fear the roll-out is not fit for purpose
Ellen Welch

"Postcode lottery"

Nicola Heslehurst, president of the Association for the Study of Obesity and professor of maternal and child nutrition at Newcastle University, said *The BMJ*'s findings were "disappointing." She said, "The deficit in funding compared with need is another blow for people living with obesity, who deserve evidence based care to manage their health needs."

Last year *The BMJ* reported that half the country did not have access to specialist weight loss services, while one in five local areas did not provide patients with access to a bariatric surgery service.

"The government promise of investment in obesity care needs to be backed up with the funding required to remove inequality in access to obesity services and treatments," Heslehurst said.

The current commissioning model had set up a "postcode lottery" of access to obesity care, she added. "ICBs in more deprived locations will have increased demand for care and need to have the budget required to address obesity inequalities."

Responding, a Department of Health and Social Care spokesperson said, "We expect NHS integrated care boards to be making these drugs—which can help tackle the obesity crisis—available as part of the phased roll-out, so those with the highest need are able to access them."

In January the government was accused of taking a weak stance on tackling the obesity crisis in England after deferring evidence based actions that could be taken immediately until after the Department for Environment, Food and Rural Affairs had published its food strategy. And in July the government emphasised the importance of expanding access to weight loss drugs in its NHS 10 year plan.

It said, "Government can only go so far on its own to end the obesity epidemic. To achieve such a significant ambition, we will need to harness scientific innovation, including recent breakthroughs in weight loss medication."

Elisabeth Mahase, *The BMJ*

Cite this as: *BMJ* 2025;390:r1855

NEWS ANALYSIS

AI tools risk overdiagnosis, top UK radiologist warns

Outgoing RCR president Katharine Halliday tells **Katie Bowie** it needs to be used carefully

Artificial intelligence tools don't currently save time for most radiologists and can risk overdiagnosis, warns the outgoing president of the Royal College of Radiologists.

Speaking to *The BMJ* in her final month in the post, Katharine Halliday said that, while "everything's digital" in radiology, plans to increasingly deploy AI risk aggravating rather than solving the problems faced by the specialty.

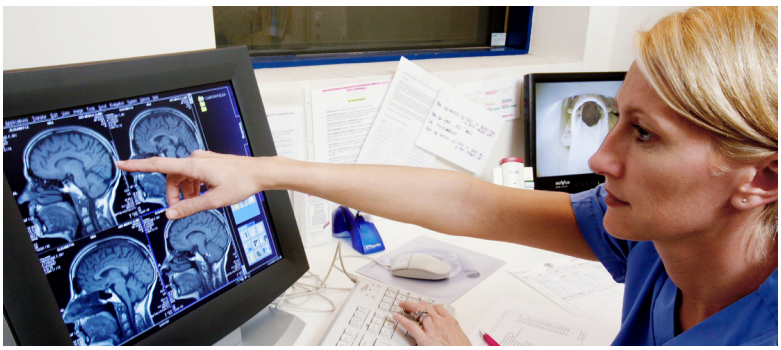
In autumn 2024 the college's annual workforce census found that 56% (62 of 110) of UK radiology departments using AI reported no change in workload, while 37% (41) said that the algorithms had actually increased it.

Currently, radiologists can use AI for diagnostic tasks such as reviewing computed tomography (CT) images. The technology can also be used for marking out tumours during radiotherapy treatment planning, much more quickly than with manual methods.

Although the college is keen to take the lead on how to best utilise AI in radiology, Halliday says the programmes are not focusing on the "most impactful things."

She explains, "At the moment a lot of the AI algorithms that are out there are looking at improving accuracy. While that's always a really good thing, the real problem is we have so many people waiting—it is capacity, not accuracy."

The excitement and possibilities of AI are really attracting people
Katharine Halliday



Unnecessary treatment

In January the government announced ambitious plans to tackle treatment backlogs in planned care, but progress has been slow. The latest NHS performance data show that the overall waiting list for treatment rose slightly from 7.36 million in May to 7.37 million in June.

Halliday warns that use of oversensitive AI could actually increase waiting lists, "One of the problems can be that it overdiagnoses things and makes you do unnecessary treatments."

Overdiagnosis, where a medical condition is diagnosed that would have never caused a patient any symptoms or health problems, can lead to potential harms, such as unnecessary treatment, psychological distress to patients, and wasted healthcare resources.

Although AI may be very accurate, Halliday says, "What's really important is how does it work with the human [clinician] and what effect does it have on the outcome of the patient?

"Because if it's making me request more CT scans, that's no good at all unless I'm getting better outcomes with it—all that information we need and don't really have at the moment."

Halliday's concern about the potential for AI driven overdiagnosis in radiology is supported by a recent evidence review by the health think tank the Nuffield Trust. This found that, although there are potential benefits to using the technology in supporting diagnostic testing, it can increase the number of false positive cases. This, the think tank warns, "may increase demand for diagnostic and treatment services further along the pathway and bring emotional burden for patients."

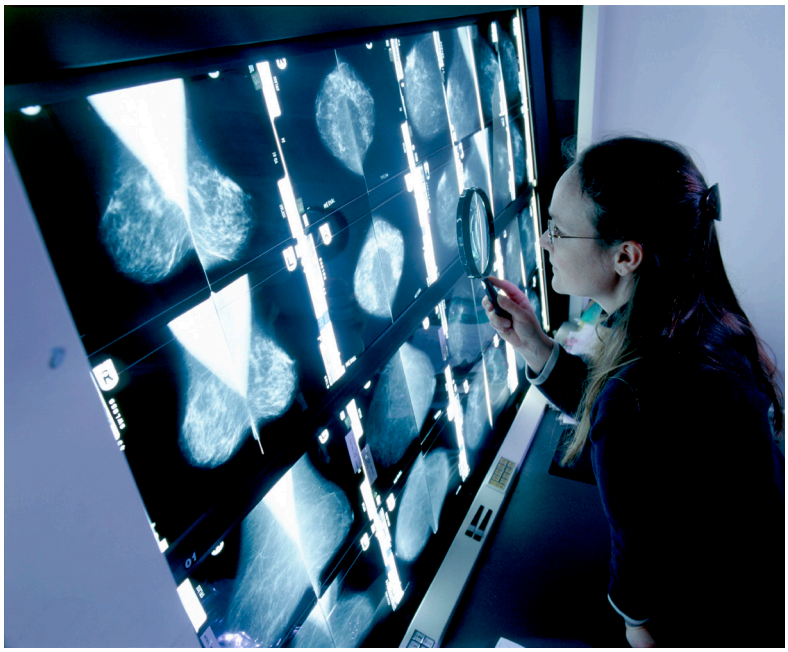
Demand for training places

A decade ago leading AI scientist Geoffrey Hinton said that "people should stop training radiologists now" as it was "completely obvious" that AI would soon outperform humans in the field.

But Halliday says the new technology is actually encouraging people to go into the specialty. "It's still a very popular subject to go into. We get between 10 and 14 applicants for every single post," she says. "So I don't think we're putting people off, and I actually think that AI and the excitement and possibilities of it are really attracting people."

But will AI ultimately lead to potential job losses? "I think our jobs will change," she suggests. "I think we'll be much more overseeing the results; there's always a role for interpreting results in the light of an individual's situation."

Last month a BMA survey found that 52% of doctors leaving foundation training (FY2) had no employment



56% of UK radiology departments **USING AI** reported no change in workload, while **37%** said that the algorithms had actually increased it

lined up just days ahead of specialty training placements beginning.

While radiology has a healthy number of applicants, this is not reflected in the number of posts available. "We all feel it's absolutely terrible for them in terms of radiology," Halliday says. "What's really awful as well is that we've got this shortage, and we can't report scans in time."

She adds, "We could employ at least double the number [of radiologists] and get all those people who we desperately need, but the trusts can't fund the training places."

Retention problems

While AI might be encouraging younger doctors to consider radiology, the specialty is struggling to retain its existing workforce.

Halliday points out that last year the median leaving age of radiologists was 50—and 54 for oncologists, the other specialty the college represents.

In comparison, NHS data from 2022 found that the average retirement age for a doctor was 61.5 years.

Halliday says that stress and high workload are prompting some radiologists to quit earlier. "Some people are moving into teleradiology—private teleradiology where hospitals pay private companies to do some of their reporting distantly—and many of our members find that that is a very flexible option.

"We have more and more international medical graduates in our consultant workforce . . . We absolutely 100% could not manage without those really valuable consultants. But then, of course, we know that they tend to leave earlier."

Halliday says the trend for radiologists to leave the profession earlier is a concern especially in the context of the "dangerous shortages" of clinical radiologists highlighted in the college's most recent workforce census.

However, she adds that although more clinicians are needed "we can't just go on increasing the workforce to meet the demand."

Instead, she believes clinicians must find ways to use AI effectively to free up hours in booking and scheduling administration, while avoiding the risks of overdiagnosis.

"It really demands that we fundamentally look at the way we work," she says.

Kate Bowie, *The BMJ*
Cite this as: *BMJ* 2025;390:r1840

UN report urges ban on all forms of surrogacy

Countries should move towards banning all forms of surrogacy, a new UN report urges. The UN's special rapporteur on violence against women and girls, Reem Alsalem (below), called for a ban on the grounds of the "exploitation and violence against women and girls" that characterises surrogacy arrangements, as well as health risks to the mother and baby.

Alsalem will present the report to the UN General Assembly in October. It calls for the 193 UN member states to "take steps towards eradicating surrogacy in all its forms." Pending its abolition, states should adopt a legal and policy framework for surrogacy that is modelled on the Nordic model for prostitution and includes penalties for commissioning parents and surrogacy agencies alongside decriminalisation and exit support strategies for surrogate mothers.

The report, based on 120 submissions from commissioning parents, surrogacy agencies, medical experts, and surrogate mothers, cites higher rates of caesarean section, gestational diabetes, hypertension, pre-eclampsia, and placenta praevia in surrogate births and lower birth weights and mean gestational ages of babies at delivery.

The UN said that few if any background checks were carried out on commissioning parents apart from their capacity to pay a "substantial sum" and that most surrogate mothers come from low income backgrounds and nations, lack effective legal remedies, and are often transferred between countries for impregnation and birth to circumvent legal frameworks.

The report also cites concerns about egg donation, noting that online recruitment of egg donors "omits vital information about the discomfort of daily hormonal injections and harmful side effects and risks, such as anaesthesia complications," and that there is an absence of healthcare follow-up after donation.

Susan Bewley, emeritus professor of obstetrics at King's College London, said, "There is no incentive for the commercial surrogacy industry to look for, and mitigate, its failures and harms. There is a low level of awareness, for example, that women and children are at higher risk of mortal complications when a woman gestates a baby she is genetically unrelated to."

Sally Howard, London
Cite this as: *BMJ* 2025;390:r1850

What's next for sugar taxes?

Chris Stokel-Walker explores where countries are with levies on sweetened drinks, whether they're working, and what future initiatives can keep improving food production to the benefit of public health

When the UN General Assembly meets in New York later this month, some attendees will take part in a high level meeting on the prevention and control of non-communicable diseases. Among the topics discussed will be sugar taxes.

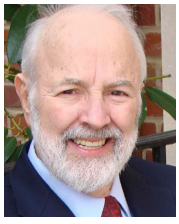
Taxes on sugar date back to the 18th century, raising £1m every year (equivalent to £158m today) for the British government through import duties when first implemented. But levies specifically targeted at improving population health are more recent.

Pacific island nations, including French Polynesia, Nauru, and Samoa, introduced sugar sweetened beverage (SSB) taxes, focused on improving health, in the early 2000s. They were followed by countries including Denmark, Finland, Hungary, and France in the late 2000s and early 2010s.

The focus on beverages has been deliberate, says Fabio Da Silva Gomes, regional adviser on nutrition and physical activity at the Pan American Health Organization (PAHO). "Sugar has a negative impact on health, but there's particular damage to health when these sugars use the vehicle of beverages," he says. "We were not designed to factor in the calories that are coming through these products, that also bypass some of the mechanisms we have to prevent overeating."

ABOVE: A truck in San Miguel de Allende and a market in Mexico City. Before the sugar levy, people in Mexico used to drink more Coca-Cola than the US

These products bypass some mechanisms we have to prevent overeating
Fabio Da Silva Gomes



The next frontier is food taxes
Barry Popkin

Where have we got to with sugar taxes?
Since the 2000s SSB taxes have become a major global public health intervention, bolstered by official guidance from entities such as the World Health Organization, which recommends SSB taxation as a cost effective strategy to reduce consumption and promote public health. WHO guidelines suggest limiting consumption of free sugars to below 5% of total energy intake for maximum health benefits.

"We have lots of countries and regions that have taxes," says Barry Popkin, WR Kenan Jr distinguished professor of nutrition at the UNC Gillings School of Global Public Health in North Carolina. The World Bank's global SSB tax database tracks 117 countries and territories that cover 57% of the world's population.

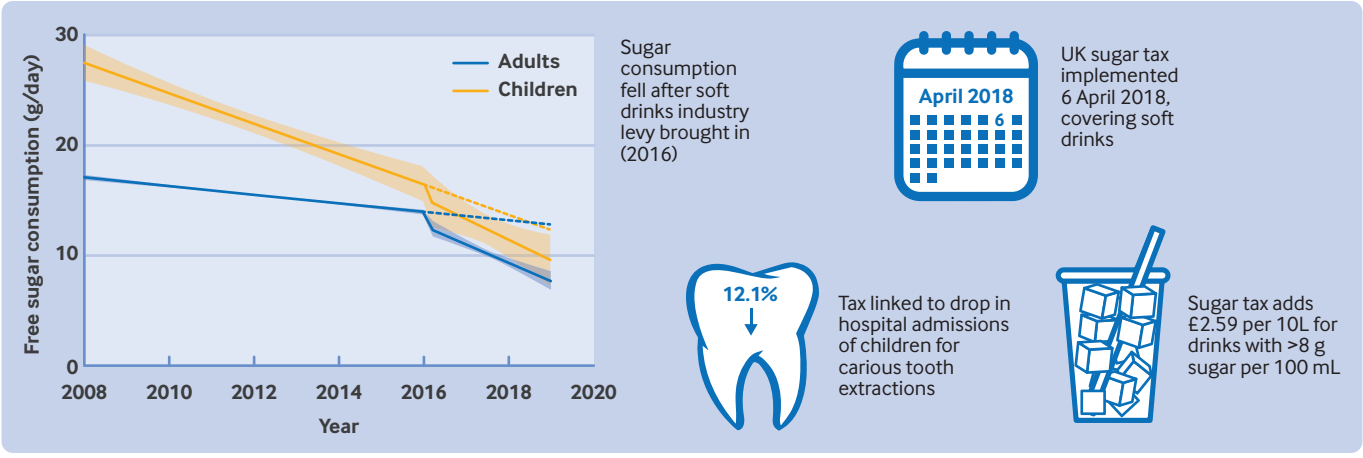
Mexico was a pioneer in the Americas, implementing a tax of one peso per litre on SSBs in 2014, which spurred the adoption of similar taxes globally. The UK introduced its soft drinks industry levy in March 2016, implementing it in April 2018.

Not all these taxes are designed with public health in mind, however. Some are simply revenue drivers for government. Tax designs vary, including taxes based on sugar density (such as in Ireland, Portugal, South Africa, and the UK) or volume (such as in Mexico, the Philippines, and some US cities), and taxes calculated as a percentage of a product's price (which is used in Bahrain, India, Kiribati, and Thailand).

"In most countries—pretty much all the countries except South Africa, the UK, and the US—they are volume taxes," says Popkin. "So there's no incentive to reformulate drinks. The only incentive is to have the sugar or not. There's some reformulation, but not much." That means the taxes will generate income for a government to spend, but there's no guarantee that the money will be directed to health interventions.

What have sugar taxes achieved?
Nevertheless, these taxes have proved successful. In the UK, less than a year after the introduction of its soft drinks focused sugar tax, daily free sugar consumption in the whole diet dropped by 4.8 g in children and 10.9 g in adults. In children, around 60% of that decrease was because of a drop in sugary drink consumption; in adults, it accounted for around half the drop.

That decline in sugar consumption had effects on health. Less than two years after implementing the tax the UK saw a 12.1% relative reduction in hospital admissions for carious tooth extractions in



all young people up to the age of 18, reducing the number of cases by 5638 a year. A similar study in Mexico found a lower probability of dental caries after its sugar tax was implemented. Population studies in Mexico and the UK found reductions in obesity rates.

In part, this is because people consume fewer sugary beverages. "Research shows that the taxes are effective in reducing sales," says Laura Cornelson, associate professor in health economics at the London School of Hygiene and Tropical Medicine.

But it's also because companies are reformulating their recipes to reduce the amount of sugar used.

Cornelson cautions against drawing dramatic conclusions about the impact of sugar taxes, however. "There's also some evidence that it is beneficial for health outcomes, but this should be understood in the context that it's hard to pinpoint effectiveness of a single measure on a complex outcome, such as obesity or non-communicable diseases," she says.

What are the controversies?

Cornelson also worries that sugar taxes can cause companies to swap one harmful ingredient for another. "There's a conversation to be had about if it's a good idea to encourage soft drink companies to switch formulation—basically to use artificial sweeteners—instead of getting people to lessen their consumption," she says. WHO cautions against merely replacing free sugars with non-sugar sweeteners as it may not improve overall diet quality and could have undesirable effects.

A study of more than 12 700 adults in Brazil found that those who consumed the most artificial sweeteners from diet soft drinks saw declines in overall thinking and memory skills, equivalent to about 1.6 years of ageing. "Low and no calorie sweeteners are often seen as a healthy alternative to sugar," says Claudia Kimie Suemoto, associate professor of geriatrics at the University of São Paulo and lead author of the study. "Our findings suggest, however, that certain sweeteners may have negative effects on brain health over time."

Others worry that consumers swap sugary soft drinks for other sweet things, such as confectionery—or, if they're adults, alcohol. Studies on the UK's sugar tax found no evidence of substitution with either, however.

A political declaration on the prevention and control of non-communicable diseases, to be approved at the UN General Assembly this month, shows the difficulties of implementing sugar taxes. The statement of commitment by member states should set the agenda for legislation, but public health groups have raised concerns about the watering down of the most recent draft, including removal of a commitment to increase taxation on SSBs.

Is it a good idea to encourage reformulation instead of getting people to lessen their consumption?
Laura Cornelson

Certain sweeteners may have negative effects on brain health
Claudia Kimie Suemoto

This has alarmed public health advocates. Alison Cox, director of policy and advocacy at the NCD Alliance, wrote, "While health harming industries may oppose these measures, it is crucial that policymaking be protected from conflicts of interest."

The softening of the declaration contrasts with WHO's "major new initiative," launched in July, that calls on countries to raise prices on sugary drinks (as well as tobacco and alcohol) by at least 50% by 2035, through health taxes.

What could happen next?

Yet the UN meeting in New York is a big moment, says PAHO's Da Silva Gomes. "These are policies requiring major action outside the health sector," he says. "Whenever this becomes a priority at a supra-ministerial level, we have a greater chance of achieving policy coherence."

But the meeting shouldn't only focus on SSBs. "The next frontier is food taxes," says Popkin. "We have eight or nine countries that now have meaningful taxes on food."

He points to trailblazing nations such as Colombia, which has a 15% tax on ultraprocessed foods that will increase to 20% at the end of this year. "That's really meaningful," he says.

After implementing the tax the UK saw a 12.1% relative reduction in HOSPITAL admissions for carious tooth extractions

Chris Stokel-Walker, freelance journalist, Newcastle upon Tyne

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HEALTH XR

THE BIG PICTURE

Ex BMJ editor arrested at Palestine Action rally

The BMJ's former editor in chief, Fiona Godlee, was among those arrested at a protest outside the Houses of Parliament on 6 September. A crowd of around 1500 demonstrated against the genocide in Gaza, the UK's supply of arms to Israel, and the proscription of the group Palestine Action. Godlee was sitting holding a sign reading, "I oppose genocide. I support Palestine Action," before being arrested.

The Metropolitan Police said 857 people were arrested under section 13 of the Terrorism Act 2000 for showing support for Palestine Action. The direct action group was proscribed as a terrorist organisation earlier this year after members broke into a Royal Air Force base and spray painted two military planes.

Speaking to *The BMJ* after her release, Godlee said, "What is happening in Gaza is so clearly a genocide unfolding with the world to see, and our government's only response is to try to silence its critics by using draconian antiterrorism laws. It also feels particularly essential for health professionals to take a stand against the killing, maiming, and starvation of civilians."

Godlee was editor in chief of *The BMJ* for more than 15 years (2005-21) and was the first woman to hold the position.

Elisabeth Mahase, *The BMJ* **Cite this as: *BMJ*2025;390:r1877**

HEALTH XR

JENNY MATTHEWS/ALAMY

EDITORIAL

Stemming medical brain drain

Low and middle income countries should prioritise investment in healthcare and professionals

The global south, home to 85% of the world's population, has disproportionately high disease burden and fragile healthcare systems. Mass net emigration of doctors to the global north—known as "medical brain drain"—is of existential concern to global healthcare and equity. For the countries that raised and educated these doctors, this loss is tied to poor population health and reflects a failing state.[1]

Nigeria exports the most health workers in Africa—13 609 in 2021-22—and is second globally only to India (42 966), with the Philippines third (11 021).[2 3] At least 16 000 doctors have left Nigeria in the past 5-7 years—around nine a day—leaving just 3.9 doctors per 10 000 population (India has 7.3, the Philippines 7.8, the US 36, and the UK 32).[4 5] These doctors largely go to high income economies, where there is a growing demand for primary care physicians for ageing populations.[6]

Less attention has been given to what source countries could do. Policies to limit health worker migration and to mandate compulsory service or compensation from departing professionals have not worked[12 13]: more sustainable reforms are needed.[14]

In 2023, Nigeria launched its National Policy on Health Workforce Migration to act at health systems level.[15] Still at early stages of implementation, its aims include reaching agreements with destination countries and with recruitment agencies, training institutions, and healthcare regulators in Nigeria and abroad that encourage the training of more doctors in Nigeria and more ethical international recruitment. Nigeria wants destination countries to invest in its healthcare training and infrastructure and to fund a year of postgraduate medical education abroad as an incentive for Nigeria's doctors to stay in Nigeria. No destination country has yet agreed or committed to investing in Nigeria's healthcare.[15]

EMMANUEL OSODI/ANADOLU VIA GETTY IMAGES

Nigeria exports the most health workers in Africa, second globally only to India

The policy promises healthcare workers in public hospitals tax breaks, credit and mortgage facilities, and pay reviews—but lacks specific increments or timelines.[15]

India, with similar policies focused on training and capacity building, achieved the World Health Organization's recommended doctor to population ratio (1 per 1000) in 2018.[17] Retention and distribution of doctors in the Philippines, South Africa, and rural Canada are influenced by individual preferences, sociodemographic dynamics, and societal needs as well as real time data on training, which Nigeria has proposed.[18-20]

Pay rises and benefits have worked in Australia, Canada, and Saudi Arabia to retain doctors and recruit foreign trained professionals.[21] In low and middle income countries, incentives have helped retain healthcare workers in underserved regions. Cambodia, China, and Vietnam have successfully implemented medical education, health financing policies, incentives and subsidies, and personal and professional support to attract and retain rural health workers.[22] In Burkina Faso and Mozambique, improved housing, formal education opportunities, and better equipped and stocked health facilities increased the likelihood of doctors choosing jobs at a public health facility.[23 24]

Support from regional and global health bodies

Regional and global multilateral health organisations must do more to support low and middle income countries to stem brain drain.[25]

Nigerian politicians often go abroad for medical treatment. Staying in Nigeria would increase public confidence in domestic healthcare. Politicians must stop merely paying lip service to investment in the healthcare sector. Healthcare needs to be more efficient, with more accountability and less waste.[26] Initiatives are needed, perhaps with private sector partners, that reward physician dedication, reduce burnout, and tackle infrastructural deficits while protecting equity, access, and quality, particularly for vulnerable populations.[27]

A clear commitment to improving the nation's economy is key to retaining healthcare workers.[16] Nigeria needs to tackle limited health budgets, political instability, armed conflicts, corruption, and poor policy implementation.

Lastly, Nigeria should tap into the expertise of its many professionals in the diaspora by encouraging them to return home to work short term or to work remotely to fill healthcare gaps. Albania, Botswana, Indonesia, and Zimbabwe have encouraged medical re-migration with financial incentives and improved domestic research and training programmes.[28 29] Low and middle income countries should also integrate the medical diaspora into nation building—that is, health policy formulation, infrastructure development, knowledge and skill transfer, and sustained institutional and research collaborations. China, Ethiopia, Haiti, India, Indonesia, the Philippines, Rwanda, South Africa, Sudan, and Zimbabwe show how this can be done.[28]

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EDITORIAL

Medicating men who have committed sex offences

Treatment should be based on medical need, not risk control

The independent sentencing review, led by former lord chancellor David Gauke, recommended extending a pilot programme in which prisoners convicted of a sex offence are prescribed libido lowering medication.[1] In response, the secretary of state for justice, Shabana Mahmood, indicated she was considering making "chemical suppression"—that is, using medication to reduce testosterone to prepubertal levels—mandatory in some cases.[2] Although "some cases" was not defined, it presumably refers to the most high risk or dangerous individuals.

The Southwest pilot programme is a recent addition to the medical management of problematic sexual arousal (MMPSA) service, funded by NHS England but provided in the criminal justice system.[3] The service has been delivered in prisons since 2015, but continuation of medication after prisoners are released can be problematic, and the pilot, carried out in southwest England, is intended to address this.

The service is designed to treat a health indication (problematic sexual arousal) rather than reoffending risk, but because sexual behaviour is fundamental to sex offending, it is likely to have a beneficial effect on both. Assessment and treatment are voluntary, and not everyone who is referred will be prescribed medication. Some people may not be clinically suitable, others may not require it, and some may choose not to take it.

The pilot is not an evaluation of treatment efficacy but of a model of commissioning and delivery in the context of prisoners moving between prisons and released across a large geographical area.

Whether medical treatment is effective is a separate question and depends on how effectiveness

Psychological therapies are the mainstay of treatment to reduce sexual recidivism

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is defined. Treatments include selective serotonin reuptake inhibitors (SSRIs) and medications to reduce testosterone levels, such as cyproterone acetate and gonadotrophin releasing hormone agonists. Ample evidence exists that testosterone lowering drugs reduce sexual interest and sexual functioning,[4] and although the evidence base for SSRIs is less solid, treatment evaluations have shown significant reduction in problematic sexual arousal as well as improved emotional regulation, cognitive functioning, and engagement in psychological treatment.[5-7] The effect of both types of medication on reoffending, however, is less clear, as it is difficult to recruit sufficient numbers to demonstrate an effect: lengthy follow-up periods are required to determine sexual recidivism, and prescribing placebo to facilitate robust evaluations in this context is ethically challenging. However, reports of men reoffending when on testosterone lowering medication are rare.[5]

Flaws in mandatory prescribing

Psychological therapies, primarily cognitive behavioural, are the mainstay of treatment programmes designed to reduce sexual recidivism and are modestly effective.[8] Medication is reserved for the estimated 25% of men imprisoned for sexual offending[9] in whom their management of sexual arousal is an important contributory factor.

Little information is available on the number of men currently prescribed libido reducing medication in the UK. An unpublished audit by the Royal College of Psychiatrists Prescribing Observatory for Mental Health in September to November 2022 identified just 96 active cases in both hospital and prison (personal communication), which is probably an underestimate.

MMPSA prescribing guidelines state that medication is taken on a voluntary basis with informed consent regarding potential benefits and side effects. But voluntary use is also likely to have a much greater impact on reoffending than mandatory prescribing. Proportionality means that mandatory prescribing would almost certainly apply to only the highest risk or most "dangerous" individuals, based on a history of repeat offending. It is also likely to involve testosterone suppression regardless of whether it is medically indicated. Mandatory medication would need to be a condition of a parole licence with some form of robust check on compliance in place, with recall to prison for non-cooperation. Evidence is difficult to come by, but numbers would almost certainly be low: in jurisdictions where mandatory prescribing exists, such as some US states, testosterone lowering medication is mandated in few cases, and outcome data, including the effect on health, are not published.[10] Most of those who go on to reoffend, however, would not meet the arbitrary threshold of high risk.

Doctors prescribe on the basis of medical need for individual patients, not to control risk. A well resourced, voluntary medication programme that included SSRIs and psychological therapy along with testosterone lowering medication for those who needed it, would have a much wider reach than mandatory prescribing.

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COVID-19

Why scientists are rethinking the immune effects of SARS-CoV-2

"Immunity debt," a theory to explain the global surge in non-covid infections since pandemic restrictions were lifted, is increasingly being challenged by emerging evidence. **Nick Tsergas** reports

The bacterial infection *Mycoplasma pneumoniae* is not known to cause widespread hospital admissions. "I can count on my two hands the number of times I'd ever seen *M pneumoniae* before 2023," says Samira Jeimy, clinical immunologist at the University of Western Ontario. "All of a sudden I feel like everybody has it."

Over the past three years similar reports have circulated of rising bacterial infections, flare-ups of old viruses becoming more common, and children landing in hospital with diseases not usually seen in young, healthy people.

One explanation offered by public health leaders has been "immunity debt"—the idea that precautions taken in the covid pandemic suppressed routine exposure to circulating pathogens, leaving people more vulnerable to them when restrictions were lifted.

The theory landed in the public consciousness at the right moment. A simple idea that sounded like science, it soothed a public seeking answers just as the world was returning to a semblance of normality. And it served a policy function, allowing governments to focus on economic recovery.

But its explanatory power has faded as the number of non-covid infections has kept rising each year. A 2024 analysis by the US Centers for Disease Control and Prevention found that invasive group A strep infections saw their most dramatic year-on-year increase from 2021 to 2022, well after most precautions had been lifted in the US. Rates have been abnormally high since then, raising questions about what might be behind the trend.

A growing number of scientists believe that the SARS-CoV-2 virus may instead be subtly altering our immune systems. If correct, their hypothesis will change how we understand everything from respiratory syncytial virus (RSV) to shingles to sepsis.

Immunity debt—or disruption?

Malgorzata Gasperowicz, a Calgary based developmental biologist, says that if immunity debt fully explained rising infection counts we'd expect to see a uniform rebound across all pathogens. But we don't, she says.

For instance, a 2024 study of more than 4000 viral cases from Ontario found higher rates of bacterial infections in people recovering from covid-19 than in those recovering from influenza or RSV—although study groups weren't perfectly matched by age or clinical setting, limiting direct comparisons.

Jeimy says that many infants and toddlers admitted to hospital with rare infections since 2022 weren't yet born when pandemic restrictions were in place, and they therefore couldn't be experiencing immunity debt. They were, however, likely to have been exposed to SARS-CoV-2.

Wolfgang Leitner, chief of the Innate Immunity Section at the US National Institute of Allergy and Infectious Diseases (NIAID), speculates that covid-19 may somehow impair the immune system's "memory" of past infections, potentially making even healthy people more vulnerable to future pathogens.

He wonders whether the virus leaves lasting scars on the immune system's T cell defences. "But that's just [my] hypothesis," he emphasises in an email.

Instead of showing that something is safe, we're asked to prove harm
Malgorzata Gasperowicz

Immunity reset?

SARS-CoV-2 is linked to "an unusually high level of 'indiscriminate' killing of T cells," says Leitner, adding that this observation is "reminiscent of" measles, which can cause immune amnesia by depleting memory B cells (a different type of immune cell), leaving people vulnerable to pathogens they were previously immune to.

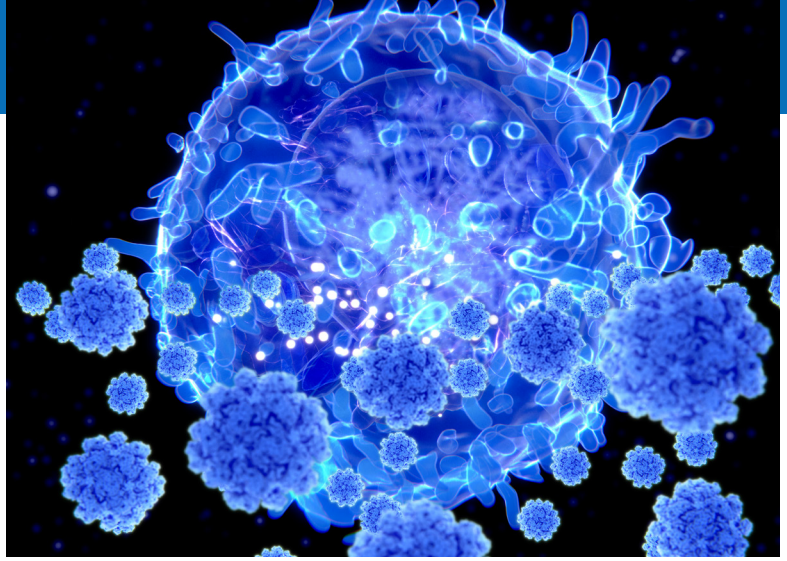
This concept of immune "reset" after infections isn't new. A hallmark of this phenomenon is the reactivation of dormant viruses, which re-emerge while the immune system is in a weakened state. Reactivation of viruses, including Epstein-Barr virus (EBV) and varicella zoster virus (VZV), has been commonly observed after covid-19.

A 2023 study reported EBV reactivation in covid positive patients at more than double the rate seen in covid negative patients.

As for VZV, a 2022 analysis of US insurance records found that people over 50 were 15% more likely to develop herpes zoster after a covid-19 diagnosis. Jeimy says, "There's a pathophysiology that already exists for other viruses like EBV or measles. The plausibility is there. The precedent is there."

Brazilian researchers found that covid-19 triggered a sharp rise in T cell exhaustion and cellular ageing. Although the comparator group was limited, the strongest effects were seen in CD8+ T cells, which suppress latent viruses such as EBV and VZV. These effects were seen even after mild infections.

Some researchers believe that these lingering immune effects, which are often subtle, may represent the sorts of immune system "scars" that Leitner describes.



Can we see clinical signs?

Dawn Bowdish, Canada research chair in ageing and immunity at McMaster University in Ontario, says that clinical signs are visible. "For people who test positive for covid-19, there's an uptick in antibiotic prescriptions," she says. "Covid-19 does have this association, for sure."

Akiko Iwasaki, director of the Yale Center for Infection and Immunity in Connecticut, says that the clinical picture aligns with what she sees at the cellular level. Iwasaki says that her laboratory sees clinically significant reductions in circulating T cells, even in patients who have not been admitted to hospital.

A 2025 study published in the *Lancet* tracked more than 830 000 US veterans and found that even non-admitted patients who tested positive for covid-19 had higher rates of bacterial, viral, and fungal infections in the year that followed. It also found that patients admitted to hospital with covid-19 were more likely to develop sepsis than those admitted with influenza.

A *Cell* study of people with "long" covid suggests that SARS-CoV-2 infection can reprogramme bone marrow stem cells, imprinting epigenetic changes that persist for at least a year, skewing some immune cells towards a state of hypersensitivity and inflammation. The findings signal a possible novel mechanism for longer term immune changes not strictly limited to populations with long covid.

Finally, a 2024 study of long covid by researchers at the University of California, San Francisco, found viral RNA in gut tissue two years after infection. Using positron emission tomography (PET) imaging, the team found that T cell activity was clustered in places where SARS-CoV-2 RNA—a likely marker of viral persistence—was also present.

I can count on two hands the number of times I'd ever seen *M pneumoniae* before 2023
Samira Jeimy

"There has definitely been a change in the character of the immune response since 2019," says Tim Henrich, immunologist and senior author of the study. "It's certainly impacting our immune health, and probably our overall health as well."

Elephant in the room

Long covid remains a hot topic among the public and researchers and has certainly raised awareness of postviral disease. Yet there persists an awkwardness, even a hostility, when it comes to the idea of SARS-CoV-2 undermining immune health.

Ashish Jha, former White House covid-19 response coordinator under President Biden, has publicly rejected this hypothesis. "There's a lot of bad information out there about how covid-19 damages the immune system. It really doesn't," he posted on X in early 2024. More than a year later, his view is unchanged.

Jha, an internal medicine physician by training, tells *The BMJ*, "Of course, some very small proportion of people who get covid will get immune dysfunction and long covid. Thankfully, that is increasingly rare among new infections." He maintains that "a lot of people who don't have much expertise" have overstated covid's potential to cause immune disruption in the wider population.

"I have seen zero evidence to support that—and in fact, all the evidence we have suggests that is not true," he says. "Except for the small proportion of people who might get some immune dysfunction—which happens with other viruses too—covid doesn't damage the immune system."

Others argue that it needn't be as black and white as "covid does or does not damage the immune system." Nor does it necessarily have the same effect in everyone.

Jeimy thinks that people who are unwilling to consider the possibility of immune damage are perhaps driven by a fear of what those answers might mean. "Nobody wants to be the one that says, 'Yes, covid-19 causes disability' [beyond long covid]," she says, alluding to the health and economic implications of such a conclusion.

Gasperowicz says, "The burden of proof has flipped: instead of showing that something is safe, we're asked to prove harm."

Henrich doesn't see the hypothesis as controversial. "We've shown immune dysfunction post-covid, including signs of exhaustion and inflammation in people without symptoms," he says, adding that, at the population level, "we are probably living with more inflammation on a day-to-day basis than we were before."

The difficulty is that these changes aren't uniform. In some patients the impact of covid-19 is dramatic; in others it's invisible. Iwasaki and her team have found persistent immune system changes in people who have recovered from covid-19, even without any symptoms.

"There are some subtle differences between healthy controls and convalescent controls," she says, referring to people who have recovered from covid. "More subtle things might be happening in that population. And now the entire world is pretty much the convalescent control."

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Medical misogyny: improving outpatient gynaecological procedures

Intrauterine procedures for outpatients, such as hysteroscopy, have attracted negative media and parliamentary attention for being poorly tolerated by some women, causing pain and even trauma. **Adele Waters** reports on how doctors are tackling the problem

During her training in gynaecology and general practice Nikki Ramskill, a Buckinghamshire GP, twice had a coil fitted. The first time, in her late 20s, was an unremarkable event in outpatient care—but the next time would prove very different.

"The second occasion when I had my coil replaced it was horrific, just incredibly painful. It felt brutal," she says. Ramskill put the difference between the two experiences down to premature ovarian deficiency. She says, "I suspect that the lack of oestrogen made the procedure very sensitive for me."

So bad was that experience that she vowed to opt for a different service the next time. "I went privately to have it done the third time. I had gas and air and a local anaesthetic on my cervix," she recalls. "I wasn't rushed. The person who fitted it was really calm. It was just a really great experience. And I would pay the money again."

Her "three very different experiences" led Ramskill to set up her own private GP service for women's health, the Female Health Doctor Clinic in Milton Keynes.

She explains, "Now, as a fitter myself, I take an overcautious approach. I'll provide gas and air and administer a topical anaesthetic on the cervix, as well as an anaesthetic gel inside the vagina.

"There's all sorts of research that says that anaesthetics don't really help, but whether or not any of that actually has an impact, I use them.

"I think, psychologically, it makes the person feel better, and therefore it makes me feel better about what I'm doing."

Hysteroscopy

As well as coil fitting and removal, other intrauterine procedures conducted in outpatient clinics are recognised as being potentially painful. These include hysterosalpingo contrast sonography (HyCoSys), a procedure used to examine the patency of a woman's fallopian tubes, and hysteroscopy, a more common procedure used to examine the inside of the uterus (see box). Both procedures require instrumentation inserted through the cervix. Sometimes hysteroscopy is combined with biopsy or a therapeutic intervention, such as the removal of a polyp.

Ramskill says, "When I was a gynaecology trainee in my early 20s, I didn't appreciate how painful these procedures were for women. I'd always been told by consultants, 'It's not painful—there are no nerve endings down there.' I used to wonder why women got so upset. Of course, there are a lot of nerve endings in a women's pelvic cavity, and these sorts of procedures can be excruciatingly painful.

"Now, women come to see me after they've had a hysteroscopy, for example, and tell me they found it very painful. They also sometimes report that they asked the hysteroscopist to stop but they just wouldn't.

"They were told, 'We haven't got all the images through yet.'

"Well, I say, getting all the images can't be at the expense of a woman being in terrible pain or fainting. We should be stopping and booking them in for the procedure under general anaesthetic."

I didn't appreciate how painful these procedures were for women
Nikki Ramskill

"Harrowing experiences"

Such anecdotes from women have helped to fuel accusations of medical misogyny in women's reproductive health—a subject recently explored by a UK parliamentary inquiry. Reporting its findings in December 2024, the Women and Equalities Committee found that doctors were too often dismissive of symptoms when women presented with reproductive health conditions such as endometriosis, adenomyosis, or heavy menstrual bleeding. The report also singled out the "harrowing experiences" of women in outpatient settings undergoing hysteroscopies and coil fitting as "one of the most troubling aspects of our inquiry."

The committee learnt that women weren't always informed about the potential pain that such procedures can induce; nor were they always able to get sufficient pain relief or stop a procedure once it was under way—all practices that, the committee noted, went against medical best practice and guidelines. It recommended that the NHS collect data on whether guidelines for potentially painful gynaecological procedures were being followed and said that such patients needed to be given a full range of options on pain relief, including anaesthesia.

So, what progress is being made? Justin Clark, consultant gynaecologist at Birmingham Women's and Children's Hospital and honorary professor of gynaecology at the University of Birmingham, says that there's been a sea change in awareness of the potential for pain in outpatient intrauterine procedures. Clark, who is a former president of

Outpatient hysteroscopy: how to improve the patient experience

Hysteroscopy enables visualisation of the uterus using a hysteroscope, which is inserted through the vagina, through the cervix, and into the uterus.

In 2023-24 the NHS carried out 263 572 hysteroscopies, of which 68% (180 878) were performed in an outpatient setting. The procedure is commonly indicated for abnormal postmenopausal bleeding.

An audit of patient experience of outpatient hysteroscopy of 5151 women in 2019 found that most women did feel pain but that this was mainly manageable: the mean pain score reported was 5.2 out of 10, with zero being no pain and 10 being the worst pain imaginable. This compared with mean pain scores of 5.5 for dysmenorrhoea. However, a third of women reporting pain from hysteroscopy found it to be 7 out of 10.

The Campaign Against Painful Hysteroscopy, a patient group, has collated the experiences of 8789 self-selecting women who have undergone the procedure since January 2019. Its analysis of the first 8000 responses shows that the vast majority (83%) had no prior discussion about the risk of severe pain, and two thirds (67%) said that their hysteroscopist didn't immediately stop the procedure when they were evidently in pain. Three fifths (60%) of the women continued with the procedure despite their pain because they didn't know that they could have the procedure as an inpatient under general anaesthetic or IV sedation.

Personal approaches

In response to such poor experiences, the Royal College of Obstetricians and Gynaecologists (RCOG) produced a good practice paper for clinicians in 2023 and updated its clinical guidance last year, encouraging all clinicians and organisations offering hysteroscopy to implement the new guidance urgently. In April 2025 it also updated its online patient advice, cautioning that while most women who undergo the procedure experienced some pain, for some women it could be severe.

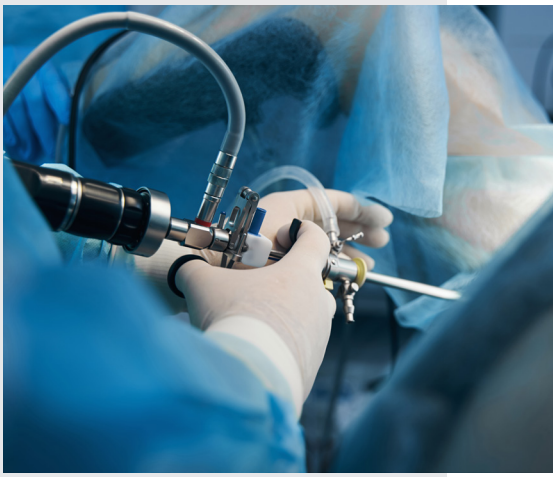
The RCOG recognises outpatient hysteroscopy as best practice and says that the ways to ensure that pain is minimised are detailed in its guidance.

Mary Connor, a Sheffield based gynaecologist who has trained thousands of doctors to perform procedures such as hysteroscopy on behalf of the RCOG, says that technical and personal approaches are important to help minimise discomfort.

She recommends taking a stepwise approach to analgesia, encouraging women to take some pain relief beforehand and then providing further analgesics as required—for example, local anaesthesia, which must be given time to work. In addition, she advises using a metal speculum rather than a plastic one when necessary, inserting it gently but not too tentatively. She also recommends using the right sized equipment, such as the narrowest possible hysteroscope and the lowest possible pressure for the irrigation fluid, as well as a smaller speculum, if used at all, for postmenopausal women.

Connor says, "You must also establish trust so that the patient is content with you carrying on. It's very important to have a patient advocate in the room whose sole job is to monitor the patient."

Connor adds, "Taking a careful approach, I've found that, for most women, procedures are well tolerated. They may be facing a possible cancer diagnosis or having a problem with heavy periods or infertility, so they're often relieved to have procedures done. Some would even walk out with a smile."



the British Society for Gynaecological Endoscopy, which leads training and research in endoscopic surgery, says, "It's not like 40 years ago, when you might find an older male gynaecologist telling a woman, 'Have a hysterectomy, love,' in a patronising way. Things have changed.

"There's an increased awareness that procedures inside the womb can be painful but, if they're done in the correct way, with good patient counselling and support, then they work for most women. They need to be conducted by adequately trained people with adequate equipment and environments, of course, and patients need to be offered choice and provide informed consent."

There has been a sea change in awareness of the potential for pain in outpatient intrauterine procedures
Justin Clark

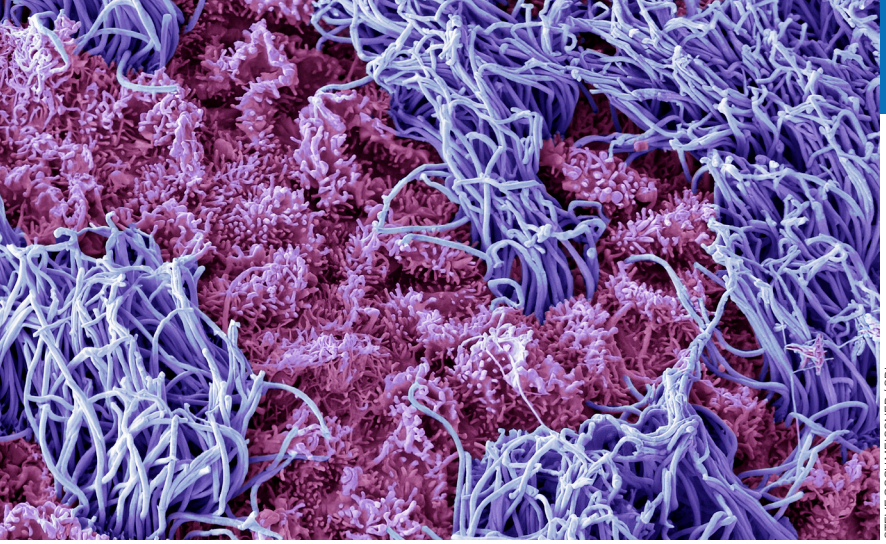
Best practice

Clark has written a best practice paper for the Royal College of Obstetricians and Gynaecologists and, with colleagues, wrote the college's guideline on hysteroscopy. The guideline sets out the approach to take, from clear communication to patients about the procedure and their options at the outset, to staffing requirements and what instrumentation to use, as well as postprocedural care.

Although the guideline was written for hysteroscopy, Clark says that the approaches recommended can equally be applied to other outpatient procedures that can cause pain, such as endometrial biopsy/ablation, colposcopy (examination of the cervix), and biopsy and coil fitting. Six years ago he also established an ambulatory care network, the British Society of Gynaecological Endoscopy, to improve standards of care in outpatient gynaecological services. The group has developed patient reported outcome measures and metrics for practitioners to audit against national results.

Clark says, "Clinicians can now use these tools, say, for a month; audit their mean pain scores, complication rates, and patient satisfaction rates; and they can compare them and see whether they're outliers." But he adds that, despite good progress in recent years, ways are needed to reduce the severe pain experienced by a minority of women. He's not convinced that conscious IV sedation (which is supported by campaigners) offers a mainstream solution—citing a lack of evidence that it's effective and a shortage of NHS infrastructure to provide it at scale.

He's more hopeful about the potential of Penthrox (methoxyflurane)—a fast acting,



STEVE GSCHMEISSNER / SPL

The WID-easy offers a less invasive test for uterine cancer

inhaled analgesic used by paramedics to manage acute pain and trauma.

"We have used it, and it seems to work very well with some procedures," says Clark. "It's safe and easily administered. We're keen to trial it to see whether this is more effective than conventional pain control methods, and we [at Birmingham Women's and Children Hospital] have applied for funding with the National Institute for Health and Care Research."

Other gynaecologists are also planning to trial alternative approaches, including less pain inducing investigations. Later this year Adeola Olaitan, a consultant gynaecological oncologist, will offer a new, less invasive test for uterine cancer for her private patients: the WID-easy test (WID-qEC is the technical name for the test used during research, while WID-easy is the commercial name among clinicians and patients). Instead of following the gold standard diagnostic pathway for abnormal uterine bleeding—transvaginal ultrasonography then hysteroscopy, if indicated—Olaitan's approach will be to take a cervicovaginal swab that will deliver diagnostic results (cancer markers using DNA methylation) within 48 hours.

The team behind the development says that, on the basis of results from the EPI-SURE study published in *Lancet Oncology*, the WID-easy test delivers a 90% lower false positive rate than the standard diagnostic pathway (ultrasound) while also delivering the same true positive rate. Its use has the potential to reduce UK hysteroscopies by 90% (a reduction of around 135 000 a year).

Patient selection and preparation

The WID-easy test could also help early detection of endometrial cancer in black women (specifically, poor prognostic serious endometrial cancers), since sonography has only around a 50% sensitivity in assessing the likelihood of cancer in black women—meaning that 50% of cancers can be missed with this method.

"If the [WID-easy] test says that you don't have endometrial cancer then you're very, very unlikely to have endometrial cancer, and therefore you don't need to have a hysteroscopy," says Olaitan, who stopped working in the NHS two years ago as a "slightly early retirement." She adds, "Not only does that reduce the need for hysteroscopy but also, from the point of view of the NHS, it frees up the diagnostic pathway so that women who require hysteroscopy under anaesthesia can have it in a timely way."

The WID-easy test is currently available only privately, but it has been incorporated into this year's NHS Innovation Accelerator programme to facilitate its widespread adoption in the NHS. Olaitan says that such advances are key to minimising pain in gynaecological tests. "If you can do less invasive tests," she says, "then that is the way forward."

Beyond that, selection and preparation of patients is key, says Olaitan, for procedures such as coil fitting and hysteroscopy. She explains, "It's about thinking about the patient in front of you, considering what would be appropriate, and discussing it, always giving them the choice."

Having all the information upfront is something that minimises distress, she adds. "If women feel listened to, it can become more of a partnership rather than something being imposed on them."

Such an approach is endorsed by the Royal College of Obstetricians and Gynaecologists (RCOG). "Our guidelines set out various approaches to optimise the experience for women, and we regularly update them to reflect best practice," says Geeta Kumar, vice president for clinical quality. More research is needed, she adds, into women's health and methods of pain relief for outpatient gynaecological procedures, as "there's a dearth of data on what would be the best way to achieve pain relief apart from general anaesthesia."

"We need more research into appropriate pain relief for gynaecological outpatient interventions," says Kumar. "This is something the RCOG has been calling for. Securing funding for such research would help us hugely in our aim to transform women's experience into a consistently positive one."

An NHS spokesperson commented, "No one should have to experience pain during these procedures, and all NHS trusts should be following the latest clinical guidance from the RCOG to deliver the best care for women. Different pain relief options should be discussed with a clinician before any gynaecological procedure—including a hysteroscopy—so that women can make choices about how they proceed, and NHS England is currently actively reviewing hysteroscopy provision."

NHS England has told *The BMJ* that it is planning a round table in autumn 2025 to identify system changes required to prioritise the recognition and management of procedural pain, among other things, and to make recommendations on appropriate pain management.

There's a dearth of data on the best way to achieve pain relief apart from general anaesthesia
Geeta Kumar

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WHY I...
row for Team GB

Doctor and Olympic gold medallist Imogen Grant tells **Elgan Manton-Roseblade** what she's learnt while rowing for Team GB

NAOMI BAKER/GETTY IMAGES

Between a surgical foundation training job and "at least daily" rowing training, Imogen Grant has a hectic schedule.

In July she had one particularly busy day, racing at the Henley Royal Regatta in the morning before rushing to work a hospital shift in Slough.

Balancing shifts and rowing is no easy feat. "A foundation doctor rota is no joke. I naively thought that because I'd managed it well through medical school it would be the same." Now, as a doctor, she says "it's a huge amount of effort."

After starting medicine at Cambridge University, Grant fell into rowing "purely by chance." She was offered two beers at a fresher's fair in exchange for signing up.

Her boat club was positive and supportive, full of "amazing people, who were willing to give up their time to teach me something new." By the end of her first term, Grant was rowing daily. Soon it was twice a day. "I'd fully been bitten by the bug."

By fourth year she was rowing for the national team and took three years out to train for the Tokyo Olympics. She and her doubles partner Emily Craig finished just one hundredth of a second short of a medal. But that only sharpened her focus. After medical school, she took another year out for the Paris Olympics, this time winning gold in the women's lightweight double sculls.

"I'm lucky that I've found two things in my life that I genuinely love: rowing and medicine." Medicine can be all consuming, and hobbies often fall away as you progress through training. At university, 18 year old Grant initially felt like she needed to be "someone who was focused on their exams and being a doctor and nothing else." Now, after entire university summers spent rowing, and four full years out of training, she is an advocate for taking time away from medicine. She says it's given her perspective, life experience, and made her a "much better doctor."

"18 year old me would be horrified that I'm 29 years old and a foundation year 1 doctor. But it doesn't matter as much as you think it does."

In the NHS, you're pushed not to think about recovery

Although doctors get caught up in the training treadmill "taking a breather is a lot more possible than people might think," she says. After the Tokyo Olympics, Grant was pleasantly surprised by how quickly her clinical knowledge returned.

Ultimately, she values what her rowing gives her. "It's where I get to think. It's where I get to relax and be outside in nature," she says. In fact, it can take less of a toll than medicine, which Grant feels has put her at greater risk of burnout than her rowing career. "I certainly think medicine is harder than being a full time athlete, by a long shot."

While working 13 hour shifts as a doctor, she doesn't usually get time to take a lunch break. And there's also no gym for staff. "How can we expect our doctors to stay active?"

The NHS could learn some lessons from elite sport, she says. "Often in the NHS, you're pushed not to think about recovery. When you're an athlete, it gets absolutely hammered home that you can't get better unless you train, but you also can't improve unless you recover." That means getting enough sleep, resting well, and having healthy and regular meals. "It's about doing the basics really, really well."

Grant also has advice for doctors who want to reignite a passion, however small. "If it's something you value, you have to make sure there's space for it." But, she says, "it doesn't have to be perfect."

"It's worth half arsing it, rather than not arsing it at all. Doing something towards your passion is better than the 'all or nothing' mentality that we as doctors are liable to fall into."

For doctors who might have let a sport or hobby drift during work or training, Grant says it can be disheartening to think about what you've lost. But she recommends imagining what you want your life to look like. "Do you want that activity to be part of your life? If the answer is yes, then it doesn't matter if you feel like you're behind. A bit of it is surely better than not trying at all."

HOW TO GET INTO ROWING

- Find your local rowing club and investigate which courses may be suitable for you. The British Rowing website could be a good place to start: www.britishrowing.org/rowing-activity-finder
- If you're a beginner, you don't need any rowing specific kit—normal running or gym clothes are perfect
- You don't have to be a teenager to start—Master's rowing (age 27 and over) is a vibrant community
- If you're nervous about trying rowing on your own, persuade a friend to go with you so you can learn and enjoy the sport together

Elgan Manton-Roseblade, *The BMJ*

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CAREERS CLINIC

What adjustments can I ask for as a pregnant doctor?

It's crucial that pregnant doctors know their rights, **Elisabeth Mahase** hears

PRIYA SUNDRAM

Complete a risk assessment early

Madeleine Openshaw, GP trainee

"Discovering you're pregnant can bring up many emotions, from excitement to anxiety. It might feel premature, but it's important that you and your line manager complete a risk assessment early as you may need immediate adjustments to keep you safe. It's important that you avoid, for example, any ionising radiation or exposure to certain infectious diseases.

"While many women will sail through the first trimester without so much as a whiff of nausea, others may feel debilitated by fatigue, insomnia, or vomiting, and thus any other necessary adjustments will vary from case to case. You may feel the need to take time off or to work from home, or move from a patient facing to an administrative role, while you manage your symptoms and your insatiable appetite for biscuits. These requests are usually signed off by your occupational health department (OH), but you can also get a fit note from your GP requesting amended duties.

"As your pregnancy progresses, you may start to feel more yourself or you may develop back pain, ankle swelling, or dizziness. You might feel apprehensive about requesting adjustments at this stage as your managers might make you feel like you're the first person to ever have asked—but they should be reminded that pregnancy is a protected characteristic.

"As you near the end of your pregnancy it may be necessary to come off certain duties such as on-calls and night shifts altogether.

"Hopefully, like me, you will have a supportive and compassionate workplace. But if this isn't the case, don't be afraid to reach out to your GP, OH, or your union."

Don't compare yourself with others

Fidan Yousuf, consultant hepatologist

"I had two pregnancies during training as a gastroenterology specialist registrar. Everyone's symptoms and journey through pregnancy are different, so be mindful not to compare yourself with others. Talking to your supervising consultant, line manager, and OH early is beneficial.

"The main challenges for me were the fatigue during the first trimester and exhaustion in the third, particularly regarding out of hours work. I was honest about the pregnancy with my junior team during nightshifts in my first trimester and took rests when I could. The whole period was exhausting. Thankfully I was able to continue normal duties including endoscopy and ward work without many other symptoms, but it's feasible some of this can be adjusted at various stages.

"Rich tea and ginger nut biscuits suggested by our specialist nurses worked wonders for my nausea and sickness. These symptoms can, however, be disabling for some.

"As my third trimester progressed, the long periods on the ward and 12 hour shifts became increasingly difficult, so I sought advice from OH and my line manager. I had a lot of support from the consultants on our team in discussing my on-call commitments with the relevant managers. I continued on-calls till quite late in my pregnancies but was able to change many night shifts to more frequent but shorter day shifts on the medical assessment unit, which was generally well staffed.

"Both my pregnancies posed slightly different challenges but I was fortunate to remain well throughout. I found advice and support from fellow colleagues and OH helpful."

Consult your union

Isslia Roberts, national officer and women's lead for HCSA—the hospital doctors' union

"Pregnancy affects women differently, from nausea and fatigue to aches, pains, or sensitivity to temperature, but as a doctor you face additional risks. Employers are legally responsible for your wellbeing at work and must conduct a health and safety risk assessment and make required adjustments.

"This process starts once you've formally told your employer you are pregnant. In early pregnancy you may want to discuss your situation discretely first. It's one reason HCSA established women focused support, where women can request a female national officer to advise on sensitive employment matters.

"Your employer should meet you to complete a pregnancy risk assessment and discuss support needs as soon as is reasonably practicable.

"Adjustments could mean different start and finish times, shorter shifts, extra breaks, or removal or reduction of on-call work. It could mean environmental changes such as a more ergonomic chair and desk or temperature control. Or adjusting your tasks to allocate more administrative work, or to avoid manual handling or exposure to harmful substances.

"Crucially, changes—even amendments to on-call work—must not impact your pay. Reducing your pay or offering less favourable terms will likely be discrimination.

"Remember: consult your trade union if you're unsure of your rights, feel you're being treated unfairly, or disagree on adjustments. Pregnancy is a huge event. Your union is here to support you through it."

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