this week

MATERNITY CARE page 44 • **VACCINE BOOSTER** page 46 • **JAVID'S IN-TRAY** page 48



Bawa-Garba is free to practise again

Hadiza Bawa-Garba is allowed to practise again without restrictions, 10 years after a 6 year old boy in her care died of septic shock following a mistaken diagnosis of gastroenteritis.

A well regarded trainee paediatrician at the time Jack Adcock died in 2011, Bawa-Garba was later found guilty of gross negligence manslaughter. Many doctors saw her as a scapegoat for an overstretched and underfunded NHS.

An investigation at Leicester Royal Infirmary found numerous system failures on the 12 hour shift when she was covering several wards without adequate supervision and with IT problems. She had just returned from 14 months' maternity leave.

After the manslaughter conviction in 2015 Bawa-Garba was given a two year suspended jail sentence. A medical practitioners tribunal suspended her from the medical register for a year. But the GMC appealed, and the High Court ordered her to be struck off. Outraged doctors crowdfunded around £350000 to take her case to the Court of Appeal. In 2018 three judges ruled the High Court was wrong and reinstated her suspension.

The case was sent back to the tribunal, which decided she should have to practise

under supervision for two years from July 2019, given her four years out of clinical practice, with a review at the end to check whether her skills were up to date. The review tribunal decided on 2 July she can now work without supervision. Sharmistha Michaels, chairing the tribunal, said it had received "overwhelming evidence" of Bawa-Garba's clinical competence.

Jenny Vaughan, chair of the Doctors' Association UK and lead for the Learn Not Blame campaign, said the campaigners welcomed the news. "We are also pleased that the GMC opted for a neutral stance.

"Healthcare desperately needs an open, transparent learning culture, where harm is minimised by learning from error and failings. The climate of fear among the medical profession created by the GMC's actions over Bawa-Garba only makes it more likely that this will happen again."

Bawa-Garba said she was "extremely thankful" to be able to continue her work "free from the GMC process." She added, "This case has had a lasting and profound effect on me, though I know none of what I have experienced compares to what the Adcock family have been through."

Clare Dyer, *The BMJ*Cite this as: *BMJ* 2021;374:n1690

Hadiza Bawa-Garba and supporters outside the Court of Appeal in July 2018, where her striking off by the High Court was overturned

LATEST ONLINE

- Heatwave causes hundreds of deaths and hospital admissions in west of US and Canada
- UK maternity services are not improving fast enough, say MPs
- Opioids: first jury trial opens in US as Johnson & Johnson pays \$230m to settle out of court



SEVEN DAYS IN

Doctors query NICE guidance to induce at 39 weeks in ethnic minority women



Doctors and campaigners have raised concerns over proposed NICE guidance that recommends doctors consider inducing labour at 39 weeks in women from an ethnic minority family background, even if the pregnancy is uncomplicated.

The draft guidance, which was under consultation until 6 July, advises induction be considered from 39 weeks in "women with otherwise uncomplicated singleton pregnancies who are at a higher risk of complications associated with continued pregnancy... for example with a black, Asian, or minority ethnic family background." It recommends that white women should be offered induction at 41 weeks.

Black women are four times as likely, and Asian women twice as likely, as white women to die in pregnancy or childbirth. Women living in the UK's most deprived areas are almost three times as likely to die as those in the richest areas.

Christine Ekechi, of the Royal College of Obstetricians and Gynaecologists, told *The BMJ* that "stratifying risk by race alone is a blunt tool." She said, "Although highlighting higher risk is important, it does not move our understanding further as to why this group of women is at greater risk."

Elisabeth Mahase, The BMJ Cite this as: BMJ 2021;374:n1711

Covid-19

England will lift most restrictions on 19 July

Most remaining covid-19 restrictions in England will be lifted on 19 July, the prime minister announced on 5 July. Boris Johnson said that, as 86% of adults in the UK had had at least a first dose of the vaccine. the government would remove legal curbs to control behaviour and would allow people to make their own decisions on face coverings and physical distancing. But some scientists warned that, as covid cases were already surging (see below), new variants could emerge if all such restrictions were removed.

Data show significant rise in infections

Latest survey data from the Office

for National Statistics showed a "notable increase in infection rates" in England, Wales, and Scotland during the week ending 26 June. Infection rates were estimated at one in 440 people in England, one in 150 in Scotland, one in 450 in Wales, and one in 670 in Northern Ireland. Sarah Crofts, head of analytical outputs for the ONS's covid-19 infection survey, said, "Though infection rates

are now similar to February, the ongoing vaccination programmes will hopefully mean fewer people will have severe symptoms."

Pandemic exposes "stark" regional health inequality

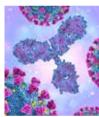
Greater Manchester had a 25% higher covid-19 death rate than England as a whole during the pandemic, a sign of how existing inequalities were exacerbated, a report from Michael Marmot (below) concluded. Life expectancy throughout England has fallen as a result of the pandemic, but it fell most steeply in the north west—by 1.6 years in men and 1.2 years in women in 2020, which compared with 1.3 years (men) and 0.9 years (women) in the country overall.

Pfizer vaccine could give lasting immunity

A small study published in Nature provided early indication that the Pfizer-BioNTech covid-19 vaccine is likely to

produce strong and lasting immunity. Researchers from Washington University School of Medicine in St Louis looked at the antigen specific B cell responses in peripheral blood (41 people)

and draining lymph nodes (14 people) who received two doses of Pfizer's vaccine (below). Nearly



after the first dose, people still had germinal centres in their lymph

four months

nodes producing plasma and memory B cells directed against the SARS-CoV-2 virus.

NHS reforms

Government publishes new health and care bill

The government introduced its new Health and Care Bill to parliament on 6 July. The bill will legislate for changes to the NHS's structure that were first set out by NHS England in its long term plan, including establishing new integrated care systems as statutory bodies from April 2022. But, though closer integration has broad support in the NHS, the bill's proposal to hand greater powers to the health secretary has prompted concern from health bodies and MPs.

Transparency

Regulators "fail to act" on unpublished trial results Nearly 6000 clinical trial results

are missing from the European trial registry, a report found, despite transparency rules requiring countries to upload results within 12 months of trial completion. Researchers from Oxford University said the findings showed that regulators in the 14 countries included had failed to ensure important data on new medicines and vaccines were made public rapidly and consistently. Published on 5 July, the report found that the largest gaps were in Italy (1221 results missing), Spain (884), the Netherlands (839), France (698), and Germany (554).

Seven in 10 professionals declare funding

In 2020 an estimated 68.1% of healthcare professionals who worked with drug companies on non-R&D collaborations agreed to be named on Disclosure UK, up from 55.9% in 2019 and 57.2% in 2018. The figures, released by Disclosure UK and the Association of the British Pharmaceutical Industry, showed that £138.9m was spent on non-R&D collaborations with healthcare professionals and healthcare organisations in 2020, 93.4% of which was disclosed against a named person or healthcare organisation.

44

MEDIC E-cigarettes JUUL Juul pays North Carolina \$40m in landmark case Iuul Labs, one of the

world's biggest e-cigarette manufacturers, will pay \$40m (£28.9m) to the state of North Carolina to settle a lawsuit that accused it of marketing to teenagers, in a case likely to set several precedents for the industry. The settlement allows the company to avoid a jury trial this summer, but lawsuits by 13 other US states and the District of Columbia are still to be resolved. A consolidated suit is also filed against Juul in federal court by thousands of counties, cities, school districts, and other plaintiffs.

Infectious disease

WHO declares China a malaria-free country



The World Health Organization awarded China a malariafree certification on 30 June, describing this as a notable feat for a country that had reported 30 million cases of the disease a year in the 1940s. Tedros Adhanom Ghebreyesus, WHO director general, said, "We congratulate the people of China on ridding the country of malaria. Their success was hard earned and came only after decades of targeted and sustained action." He added that China's success showed "the world that a malaria-free future is a viable goal." The country is the first to have achieved this status in the WHO Western Pacific region in more than 30 years. The last countries included Australia (in 1981), Singapore (1982), and Brunei Darussalam (1987).

Neonatal care

Dozens of babies died or had brain damage at trust

Errors during childbirth led to dozens of babies dying or being left with brain damage at Nottingham University Hospitals NHS Trust, an investigation found. The *Independent* and *Channel 4* News uncovered many examples of poor care over the past decade and found that managers had failed to investigate concerns properly and altered reports to divert blame away from the trust's maternity unit. Tracy Taylor, chief executive of the trust, said, "We apologise from the bottom of our hearts to the families who have not received the high level of care they need and deserve."

Stroke

Signs of raised risk may appear 10 years earlier

The telltale signs of a person's susceptibility to a stroke may appear as early as 10 years before the event, research published online in the Journal of Neurology Neurosurgery & Psychiatry found. Researchers from the Erasmus Medical Centre in Rotterdam found that stroke patients experienced much steeper declines in cognitive abilities and everyday functioning—beginning around a decade before their first stroke—than people who did not have a stroke, and women showed a greater risk than men.

Cite this as: BMJ 2021;374:n1698

E-cigarette brand pays out

in which it was accused

of marketing to teenagers

£28.9m to avoid a US jury trial

People in the UK had consumed calories than normal levels by May 2020, towards the end of the first lockdown. Calorie intake remained **O** higher on average during the second half of 2020 [Institute for Fiscal Studies]

SIXTY SECONDS ON ... EU COVID **CERTIFICATES**

EUROPE-WIDE TRAVEL IS BACK . . .

Unfortunately, many people in the UK aren't eligible so can't take advantage of this.

BECAUSE OF BREXIT?

Indirectly. The UK now has separate systems, and citizens lost the right to free movement. Meanwhile, the EU has launched a digital covid certificate to allow free movement, to be issued and recognised by all EU states.

HOW DOES IT WORK?

The certificate contains a QR code showing that the bearer has been fully vaccinated and tested negative for, or recently recovered from, covid-19. Fully vaccinated EU citizens will be exempt from travel related testing and quarantine across the region 14 days after having received their last dose. Only UK residents who are citizens of EU member states living here may be eligible for one.

SOUNDS LIKE THE NHS COVID PASS

This is a different system so is not automatically recognised by the EU, although some countries, including Spain and Greece, are accepting it. The technologies behind the two are similar, so the EU and the UK are working on a mutual recognition agreement before the peak holiday season starts.

GREAT. SO IT'S THE MED IN AUGUST?

Not so fast. Check which vaccine you had first. If it's AstraZeneca then you should be covered, but you'll need to check the batch numbers to be sure.

I THINK IT WAS 4120Z001 . . .

Sorry, looks like you will be holidaying in Cornwall this year. Unfortunately, batch numbers 4120Z001, 4120Z002, and 4120Z003 are Covishield, which is not recognised by the EU.

ISN'T ALL ASTRAZENECA RECOGNISED?

Unfortunately not. While the two vaccines are identical, the European Medicines Agency hasn't approved the India-made Covishield, because the EU isn't receiving any doses.

BUREAUCRATIC NONSENSE!

Maybe, but there is still hope. WHO has approved Covishield, and EU member states can recognise other vaccines—for example, Greece accepts Sinovac, Sputnik V, and several others.

Ingrid Torjesen, London

Cite this as: BMJ 2021;374:n1702

the**bmj** | 10 July 2021 45

Millions of vulnerable people could be given booster vaccinations from September

ovid-19 booster vaccinations should be offered in England from September, the Joint Committee on Vaccination and Immunisation has advised.

JCVI's interim advice, which will be updated before September after further data analysis, could lead to millions of the people who are most vulnerable to covid-19 being offered the booster vaccination in a two stage approach alongside the annual flu vaccination programme.

JCVI advised that in the first stage a third dose of covid-19 booster and annual flu vaccine should be offered as soon as possible from September to immunosuppressed adults aged 16 It makes no sense to limit the proportion of vaccines delivered locally by **GP** sites Richard Vautrey or over, people living in residential care homes for older adults, all adults aged 70 years or over, clinically extremely vulnerable adults aged 16 or over, and frontline health and social care workers.

The second stage would see the covid booster vaccine being offered as soon as possible after stage 1 to all adults aged 50 or over, people aged 16-49 in groups at risk of serious illness from flu or covid-19,

and adult household contacts of immunosuppressed people. There would be an equal emphasis on deployment of the flu vaccine, where eligible, in these groups, said JCVI.

"Prepare to deliver"

On 1 July NHS England issued provisional guidance to local leaders stating that, although further data were expected, "the core planning scenario systems should prepare to

 $\frac{IN\,MOST\,CASES}{40\%}\ of\ covid-19\ booster\ vaccination\ through\ general$ practice and a maximum of 75%



Upgrading to FFP3 cuts infection risk, research finds

Upgrading face masks to FFP3 respirators for healthcare workers on covid-19 wards produced a dramatic reduction in hospital acquired SARS-CoV-2 infections, shows research carried out at Addenbrooke's Hospital in Cambridge.

The study, published as a preprint, has been welcomed by campaigners who have been calling for better personal protective equipment for NHS staff.

For most of last year Cambridge University Hospitals Trust followed national guidance to use fluid resistant surgical masks unless carrying out aerosol generating procedures, when FFP3 respirators were advised.

Since the start of the pandemic the trust has been regularly screening its workers for SARS-CoV-2 even when they were without symptoms. It found that those on

"red" covid-19 wards were at greater risk of infection than staff on "green" wards even when using the recommended protective equipment. So in December the trust changed its policy so that staff on red wards wore FFP3 masks.

Before the change, cases among staff were higher on covid than on non-covid wards in seven out of the eight weeks analysed. The incidence of infection on the two types of ward was similar. Of 609 positive results, 169 were included in the study. Those excluded were workers who were not ward based or who worked between wards, nonclinical staff, and staff in critical care areas.

Ward based exposure

The researchers developed a simple mathematical model to quantify the risk of infection. This found that the risk of direct infection from working on a red ward before the change in policy was 47 times the corresponding risk from working on a green ward. Although almost all cases on green wards were likely to have been caused by infection in the community, cases on red wards at the start of the study were attributed mainly to direct, ward based exposure.

The model also indicated the introduction of FFP3 respirators provided 100% protection (confidence interval 31.3% to 100%) against direct, ward based covid infection.

Study author Chris Illingworth from the MRC Biostatistics Unit at Cambridge

University said, "Before the face masks were upgraded, the majority of infections among healthcare workers on the covid-19 wards were likely because of direct exposure to patients with covid-19. Once FFP3 respirators were introduced, the number of cases attributed to exposure on covid-19 wards dropped dramatically—in fact, our model suggests that FFP3 respirators may have cut ward based infection to zero."

The BMA, the Royal College of Nursing, and other professional bodies have been calling for some time for FFP3 masks to be provided more widely. FreshAir NHS welcomed the new study, saying it provided yet more evidence of why the policy needed to change.

Public Health England recently updated its guidance to oblige NHS organisations to assess the risk that covid posed to staff and provide FFP3 respirators where appropriate and not just when aerosol generating procedures were taking place, after a review by the government's Scientific Advisory Group for Emergencies, published in April.

lacqui Wise, Kent

Cite this as: BMJ 2021;373:n1663

The model indicated that the introduction of FFP3 respirators provided 100% protection (confidence interval 31.3% to 100%) against

direct, ward based covid infection

deliver booster doses of covid-19 vaccine to the individuals outlined ... between 6 September and 17 December 2021 (15 weeks)."

NHS England said local systems should seek to spread capacity across community pharmacies. vaccination centres, and general practices so as to "provide resilience and ease pressure on other services and workforces," adding, "For most areas it may be hard for general practice to deliver more than around 75% of vaccinations, based on learnings from phase 1." It said that in most cases local systems should "prudently plan for a minimum of 40% of covid-19 booster vaccination through general practice and a maximum of 75%."

Richard Vautrey, chair of the BMA's General Practitioners Committee, said it was good that JCVI was already discussing administering covid



booster jabs in the same appointment as flu vaccines but questioned the advice to limit GPs' involvement. "Given the achievements of the first round of vaccinations, it makes no sense for NHS England to suggest limiting the proportion of vaccines delivered locally by practice sites—and we'd be concerned that this will be interpreted as a cap on general practice's involvement in the programme and placing barriers in

GPs need clarity on their role as a matter of urgency Martin Marshall (above) the way of patients being vaccinated by their local, trusted surgery team," he said.

Martin Marshall, chair of the Royal College of General Practitioners, urged the government to provide clarity on exactly what the role of general practice was likely to be "as a matter of urgency, so that plans and decisions can be made appropriately."

Ravi Sharma, the Royal
Pharmaceutical Society's
director for England, called for
the "widespread involvement of
community pharmacy in delivering
the covid booster jab and flu jab
together for the over 50s, and
appropriate funding to ensure this
service can be delivered, including a
collaboration between pharmacy and
general practice."

Shaun Griffin, London
Cite this as: BMJ 2021;374:n1686

GP staff face abuse during vaccination rollout, poll finds

Over half (52%) of general practice staff have received threats of physical abuse while working on the vaccination programme, a survey has found.

The poll of 222 staff by the Medical Protection Society also found that 53% said that their surgery or vaccination centre had been defaced by antivaccination material. The survey included GPs, nurses, and practice managers throughout the UK.

One respondent said, "Staff of all disciplines are leaving the profession in droves because of the behaviour of the public. Morale is the lowest I have ever known, anyone near retirement is retiring early." Another said, "Abuse—especially written and posted in the prescription box on the gate—has resulted in staff being very concerned for their safety at the surgery."

Two thirds of survey respondents (60%) said that abuse and complaints relating

Wellbeing support must be provided to all GP surgery staff Pallavi Bradshaw

to the covid-19 vaccination programme had affected their own or their team's mental wellbeing. A further 71% said that the increased workload resulting from the programme had affected wellbeing.

Pallavi Bradshaw, medicolegal lead for risk prevention at MPS, said practices had borne the brunt of patients' frustration. "GPs are mentally and physically exhausted, with the risk of disillusionment and burnout higher than ever," Bradshaw said. "Wellbeing support must be provided to all GP surgery staff who are feeling overwhelmed, and a zero tolerance policy of abuse must be enforced so healthcare workers feel their safety is a priority."

Abi Rimmer, *The BMJ*Cite this as: *BMJ* 2021;373:n1665

Long covid "under-reported in GP records" suggests study

GPs may be under-reporting long covid, say researchers who analysed 58 million primary care records and found a much lower prevalence than previous survey estimates.

The analysis found only 40 cases of long covid reported per 100 000 people. Questionnaires such as React-2's have estimated that around two million people had the condition.

The analysis, published in the *British Journal of General Practice*, also found wide variation in reporting of long covid by practice, region, and notes systems used by doctors.

The study found that up to 25 April there were only 23 273 cases with a code indicative of a long covid diagnosis. Cases ranged from 20.3 per 100 000 people in the east of England to 55.6 in London. Rates were higher among women (52.1 per 100 000) than men (28.1).

Ben Goldacre from Oxford University's Nuffield Department



- HALL/PA/ALA

of Primary Care Health Sciences and the lead researcher, said, "We were surprised to see almost a 100-fold difference in prevalence between population survey estimates and formally recorded diagnoses."

The researchers called on NHS Digital to update diagnostic codes to include the phrase "long covid" as "there is now a clear mismatch between formal terminology and popular parlance." They also called for NICE and NHS England to warn doctors that correctly coding long covid was a "high national priority."

Jacqui Wise, Kent Cite this as: BMJ 2021;374:n1685

NEWS ANALYSIS

Sajid Javid: What can doctors and the NHS expect from the new health secretary?

The former chancellor has been appointed to oversee health at a precarious moment. **Jacqui Thornton** considers what the medical profession can expect from the man nicknamed "The Saj"



s England's new health and social care secretary again took his seat on the front bench, a wag pointed out he was not wearing the NHS badge beloved by his predecessor, Matt Hancock.

"It's not about badges, but delivering for the NHS," he shot back on Twitter, setting his stall out early.

But as he takes on this new role Sajid Javid remains somewhat of an enigma when it comes to his portfolio. In a 9000 word Wikipedia profile the only mention of "health" for the Bromsgrove MP comes with his latest Cabinet position.

Voting record

His parliamentary voting record shows that he has consistently voted for NHS reorganisation so that GPs can buy services on behalf of their patients and repeatedly against restricting services to private patients by the NHS.

On a more ethical topic, he has never voted on allowing terminally ill people to be given assistance to end their life. In his questions to ministers, recent subjects include mental health and nature and medical research into Parkinson's and Alzheimer's.

On smoking he's more mixed:

Javid's
experience
in working
across a
number of
departments
as well as the
Treasury will
be helpful
to him
Nigel Edwards

he's been absent from two votes on smoking in vehicles, and in 2010 he voted to exempt pubs and private member clubs from the smoking ban where no food was being served. But maybe actions speak louder than words: in the first few days of taking over the health department a Westminster source said that the occasional smoker had finally quit.

He certainly appears determined; other descriptions of The Saj, as he is known, include solid and a straight shooter. He may seem a little mechanical when speaking, but privately it is said that he's convivial, modest, and liked.

The former banker has had several high profile appointments in government, including chancellor, home secretary, housing and local government secretary, and secretary for culture, media, and sport. All of these were held for relatively short periods of time, which Mike Birtwistle, founder of the health policy consultancy Incisive Health, says may be an issue. "The truth is we know relatively little about Javid's record as a minister because he has not stayed in any role for long enough to be accountable for much long-term delivery," he wrote in his blog.

Full in-tray

Javid, the first health secretary from a black or Asian background, of Muslim heritage and married to a practising Christian, has a number of pressing issues to sort out. Among the biggest are managing the covid pandemic, steering a potentially controversial new health and care bill through parliament, appointing a new chief executive for NHS England, navigating the workforce crisis, and dealing with the huge backlog in care.

Birtwistle suggests that getting up to speed on contentious issues will not be

a new experience for him, having been appointed home secretary in the wake of the Windrush scandal.

Jennifer Dixon, chief executive at the Health Foundation, suggests that to ease the bill's passing Javid may have to ditch controversial plans that would give his role more power over NHS national bodies and local systems.

But beyond the fire fighting and delivery of existing commitments, Dixon said Javid could really make his mark by focusing on underlying poor health—helped by his previous roles. She said, "Wider factors such as housing, poverty, work, and early years support affect population health far more than healthcare. Javid could lead the way by putting health centre stage in the government's levelling-up agenda through an intelligent cross government strategy."

An economic mind?

Nigel Edwards, chief executive of the Nuffield Trust, said there were two schools of thought on whether Javid's background in the Treasury and in banking would be a good thing when it came to the health and social care role.

Edwards said that, as in many other rich countries, people in economic and finance ministries often regarded health as a sinkhole for money. But he said Javid could decide to use his inside information on how the Treasury works to fight his corner for the health department, with a spending review due in the autumn.

"It could go either way," Edwards said, "but most people tend to favour the second view, and if this is the case his experience in working across a number of departments as well as the Treasury will be helpful to him." He added, "The NHS does not need lots of big new ideas [but] rather the Alan Johnson approach, trying to knit the system back together, focusing on the

morale of the workforce. He has some of the attributes required."

Sally Warren, director of policy at the King's Fund, said the backlog of care will become an increasing area of concern for the public and the government, but its scale and an exhausted workforce mean the pace needs to be realistic. "He needs to ensure he doesn't overly focus on the most visible point—elective waiting times and GP access—but ensure an equal focus on other parts of the system which are under similar pressures, such as mental health and community health services," she said.

"The temptation will be to promise a quick recovery, but he must bear in mind the sector's ability to deliver."

Need for caution

Edwards expects Javid to take a cautious approach, given that many of the big issues, such as the retention of doctors and burnout, are out of his immediate control. "As we are coming out of covid we have not seen a resetting. If anything, demand seems to be significantly up," Edwards said. "The system is not very resilient; I would be concerned about that. He can't fix the workforce quickly and he ought to be paying attention to it."

With the BMA's Consultants Committee threatening industrial action over the 1% pay rise for doctors (see right), and the continuing pension saga, Edwards adds, "All of this talk should make him cautious: it is certainly not the time for taking on professionals as Jeremy Hunt did with junior doctors."

But Javid's attitude to lifting covid restrictions seems less cautious than that of his predecessor. In a notable shift in tone from Hancock, he has spoken of "having to learn to accept the existence of covid and find ways to cope with it—just as we already do with flu."

This stance puts him at odds with the BMA and with experts such as Stephen Reicher, who has advised the government on behavioural psychology and sits on the Independent SAGE group. Reicher said it was "frightening" to have a health secretary "who doesn't realise that those who do best for health also do best for the economy" and "who wants to make all protections a matter of personal choice."

Jacqui Thornton, London Cite this as: *BMJ* 2021;274:n1700



Consultants threaten to take industrial action if 1% pay rise offer is not improved

Senior doctors will be consulted on taking industrial action if the government's 1% pay rise offer is not improved, though they have vowed not to leave patients "unsupported."

The BMA said on 2 July that an overtime ban by consultants was a possibility to protect their pay, which had fallen by nearly 30% over the past decade.

Angry and underappreciated

"For the government to be suggesting a below-inflation pay award of 1% when inflation's been projected at 4% is absolutely shocking," Vishal Sharma, deputy chair of the BMA's UK Consultants Committee, told the BBC *Today* programme. "It's really left consultants angry and feeling underappreciated."

Sharma said data from the Nuffield Trust had shown consultants, who were "exhausted" by their workloads, had experienced the "worst pay erosion" of employees across the public

and private sectors.

In March 2020
the Department of
Health for England
proposed a 1%

pay rise for consultants and salaried GPs working in England, in evidence submitted to the Review Body on Doctors' and Dentists' Remuneration (DDRB) for the 2021 to 2022 pay round. The DDRB, which advises the government on NHS salaries, has yet to make public its final recommendation.

Sharma outlined how the BMA would respond if the offer was not raised closer to 4%, such as an overtime ban, and whether the pay review process was sufficiently independent.

Further action

He told the BBC, "The first thing we'd do is see what the pay award is going to be. Then quickly we'll ask our members whether they want to take any further action or even industrial action.

"If members are telling us very clearly they want to take some form of action, that's when we'd have to think about going to a ballot."

Sharma added, "To be absolutely clear, consultants would not down tools: they would not leave patients unsupported and not looked after. What we're talking

about here is really that kind of extra work that people are really struggling to do."

He said he was fully aware of the stresses facing patients amid current pressures. "But there comes a point where consultants will need to take control of this because, unless things actually change, where is it going to end?"

Sharma said the DDRB had failed in its remit over recent years to ensure that doctors' pay kept pace with inflation and had followed tight pay limits set by the government. He said the government risked losing the goodwill of staff if it didn't reward them fairly and persisted with a

The government has committed to providing a pay uplift for NHS staff to acknowledge their extraordinary effort DHSC spokesperson

1% pay rise that he termed a "slap in the face."

A spokesperson for the Department of Health and Social Care said, "We are incredibly grateful to all our NHS staff. This year the government has committed to providing a pay uplift for NHS staff, including consultants, when uplifts across the public sector have been paused, to acknowledge the extraordinary effort of NHS staff through the pandemic.

"We recognise the recommendations from the pay review bodies are an incredibly important issue and we will carefully consider them before responding."

Matthew Limb, London
Cite this as: BMJ 2021;374:n1689

SUGGESTING a below-inflation pay award

of 1% when inflation's been projected at 49 absolutely shocking," Vishal Sharma





THE BIG PICTURE

Nation marks NHS anniversary

Landmark sites across England, including No 10 Downing Street and the Liver Building in Liverpool, turn blue as the country celebrates the NHS's 73rd anniversary and thanks its staff for their service during the pandemic.

The light show on Saturday 3 July, which also turned football stadiums, town halls, churches, hospitals, and bridges blue, was followed on Monday by a special commemorative service at St Paul's Cathedral.

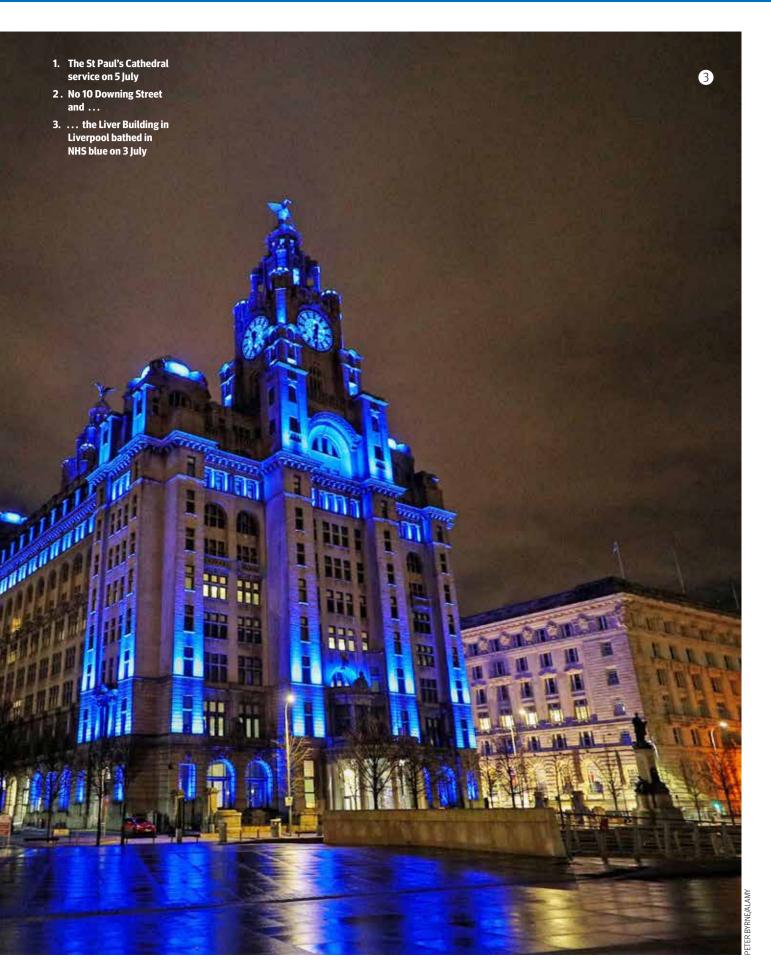
Speaking to the congregation—which included healthcare workers, patients, political leaders, and the Duke of Cambridge (but not the duchess, who was self-isolating)—Simon Stevens, the outgoing NHS chief executive, described the event as an opportunity for "cautious pride in science, treatments, and our vaccines." He added that it was also a time for "anger and regret" over the millions of people around the world who have died from covid-19.

He said the NHS was an "inspiring example for our generation of how out of adversity can come strength."

Alison Shepherd, The BMJ

Cite this as: *BMJ* 2021;374:n1704





Priorities for the new health secretary

The backlog, the workforce, social care, and tackling inequalities

ngland's new secretary of state for health and social care Saiid Iavid arrives at a precarious moment. Covid-19 cases are rising steeply and further easing of social restrictions is planned for 19 July. The boss of NHS England, Simon Stevens—responsible for leading much of the NHS's pandemic response—is standing down shortly after. And the government is—or at least was-soon expected to publish its health and care bill, setting out plans to reorganise parts of the NHS in England. Javid says his immediate priority is the pandemic response.2 But what should be his wider priorities? Four areas are particularly important.

The first is tackling the backlog of unmet need. Covid-19 led to massive disruption of NHS services. The number of people waiting for routine hospital care has now passed five million—the highest since records began—and nearly 400 000 have been waiting over a year for treatment.³ There may be six million "missing patients" yet to be referred for elective care.⁴ And covid-19 is likely to create additional health needs, such as for mental health support.⁵⁻⁷

The size of the challenge is eye watering, and the policy response from government must grow to match it. Labour's "war on waiting" in the 2000s¹⁰—backed by substantial increases in funding and staff—shows the scale of action needed.

The second priority is supporting and expanding the health and care workforce. Before covid-19, staffing gaps stood at around 100 000 in the NHS¹¹ and 122 000 in social care. ¹² During the pandemic, staff have worked under incredible strain and put themselves at risk to help others, sometimes without adequate protection. ^{13 14} Social care staff have been more likely to die from



The size of the challenge is eye watering, and the response from the government must match it

covid-19 than others of the same sex and age. ¹⁵ Staff are exhausted, and some feel abandoned. ¹⁶ Both sectors need long term workforce strategies, supported by multiyear investment. But they currently have neither. Javid must also soon make decisions about NHS pay. NHS wages per employee fell in real terms over the past decade. ¹⁷ The government's proposed 1% pay rise for staff in 2021-22 risks exacerbating staffing shortages.

Threadbare

Adult social care in England is a third priority. The care system that entered the pandemic was a threadbare safety net, scarred by decades of political neglect and underfunding. The effect of the pandemic on people receiving care has been grim. By April 2021, there had been 27 200 excess deaths among care home residents and 9600 excess deaths among people receiving care at home. Unmet need for care and the burden on unpaid carers—mostly women—seem to have increased. 18

Fundamental reform of the system is needed to deal with the longstanding policy failures exposed by covid-19. As Javid knows, if it chooses to, government can afford to provide fairer and more generous support for vulnerable people in society.¹⁹

The fourth priority is reducing health inequalities. The government has promised a white paper on "levelling up" and is reorganising the English public health system. But so far it has not grasped the scale of action needed.

This is another opportunity for Javid to learn from the 2000s-the last time England had a national health inequalities strategy. That approach included better support for families, engaging communities, efforts to tackle poverty, improving access to NHS care, and action on underlying social and economic determinants of health-combined with increased investment in public services and social programmes. The strategy contributed to reductions in social inequalities in some health determinants and modest reductions in health inequalities over time. 25-27 A similar approach is now needed to guide public policy after the pandemic.

None of this will happen without additional government spending. Hope rests on Javid convincing his successor at the Treasury substantially to increase investment in health at the autumn spending review. Feels unlikely? The risk is that the most visible priorities-for instance, in NHS hospitals—are put ahead of investment in social care and wider services that shape health and inequalities. Both are needed. Javid must also give NHS leaders the backing they need to recover services. This means going with the grain of the NHS's plans to boost local collaboration while curtailingor dropping-Hancock's misguided proposals to bring the NHS under closer ministerial control.²⁸

Appointing a credible chief executive to replace Simon Stevens is also critical to gain the trust of the service.

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Aducanumab for Alzheimer's disease?

Patients and families need real—not false—hope

he US licensing of Biogen's aducanumab as "the first ever disease modifying drug for Alzheimer's disease" was hailed as a major advance by many. However, in response to the decision, three members of the US Food and Drug Administration's expert independent advisory committee, which voted almost unanimously against approval, resigned, with one describing it as "probably the worst drug approval decision in recent US history." What does aducanumab's controversial approval in the US mean for patients, clinicians, and researchers?

Amyloid protein clumps in the brain (plaques) are a neuropathological feature of Alzheimer's disease and widely assumed to trigger a cascade of changes that cause cognitive decline. Aducanumab is a monoclonal antibody that removes amyloid plaques. The central controversy is whether the amyloid clearance protects patients from cognitive and functional decline.

This should have been answered by two identically designed phase III trials, but it wasn't. Both were stopped after preplanned early analyses on data up to December 2018 determined that the trials were "futile". However, Biogen, which funded the trial, continued collecting data until March 2019. Reanalysis of data up to March 2019 confirmed the drug's ineffectiveness in one study, but the other suggested cognitive benefit.

Biogen submitted its reanalysis to the FDA, and together they ran several retrospective analyses to explore the discrepancy between the two trials. None of these analyses found anything more persuasive than a chance result that would have averaged out as ineffective had the trials continued to completion.

The FDA concluded that there were "residual uncertainties



This story may damage public trust in regulatory and licensing institutions

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regarding clinical benefit."8 Instead of recommending a new phase III trial, it granted a licence under its "accelerated approval" pathway for drugs that "may provide meaningful therapeutic benefit" based on a surrogate endpoint "that is reasonably likely to predict a clinical benefit."8 This decision was remarkable because the only evidence that amyloid removal slows cognitive decline comes from their retrospective analysis of the one trial and ignores abundant evidence of no benefit,56 including the second negative, identically designed trial.

Years of uncertainty

Attempting reassurance, the FDA committed Biogen to a nine year post-approval confirmatory study. So we may not know until at least 2030 whether aducanumab slows cognitive decline, during which time the drug will be sold for use at a cost of \$56 000 (£41 000; €43 000) per person each year.¹

A big challenge for US clinicians and patients is the FDA decision to approve aducanumab for any patient with Alzheimer's disease, 9 despite Biogen's trials including only those with early disease.

What will happen outside the US? In 2018 the European Medicines Agency (including the UK) emphasised the need for trials to show cognitive and functional benefits rather than focusing solely on surrogate endpoints such as amyloid plaques. Approval of aducanumab in Europe would be inconsistent with this guidance and is therefore unlikely.

Even if approved, bodies such as the UK National Institute for Health and Care Excellence would struggle to reconcile uncertain clinical efficacy with the cost of treatment: as well as monthly intravenous infusions for an indefinite period, patients require repeated magnetic resonance imaging to monitor for side effects; 35% of patients in the trials experienced brain oedema and 19% micro-haemorrhages at the recommended dose.⁴

This evolving story may ultimately damage public trust in regulatory and licensing institutions. People with Alzheimer's disease and their families need hope, not false hope. Aducanumab's approval on a technicality could undermine regulatory standards and "set a dangerous precedent."

The debate about the role of amyloid in Alzheimer's disease remains intensely controversial. Aducanumab's approval does little to resolve this controversy, while creating unhelpful uncertainties for patients, clinicians, and researchers. Some see aducanumab as proof of concept for the amyloid cascade theory, justifying decades of unsuccessful research exposing thousands of participants to the side effects of experimental treatments. Others fear it will simply encourage futile investment in anti-amyloid therapies, diverting funds away from effective prevention measures such as improving physical activity or reducing hypertension, 13 and better support after diagnosis.

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COVID-19

The lab leak hypothesis: How the media fell victim to a misinformation campaign

The theory that SARS-CoV-2 may have originated in a lab was considered a debunked conspiracy theory, but some experts are revisiting it amid calls for a new, more thorough investigation.

Paul Thacker explains the dramatic U turn and the role of contemporary science journalism

or most of 2020, the notion that SARS-CoV-2 may have originated in a lab in Wuhan, China, was treated as a thoroughly debunked conspiracy theory. Only conservative news media sympathetic to President Donald Trump and a few lonely reports dared suggest otherwise. But that all changed in the early months of 2021, and today most outlets across the political spectrum agree: the "lab leak" scenario deserves serious investigation.

Understanding this dramatic U turn on arguably the most important question for preventing a future pandemic, and why it took nearly a year to happen, involves understanding contemporary science journalism.

A conspiracy to label critics as conspiracy theorists

Scientists and reporters contacted by *The BMJ* say that objective consideration of covid-19's origins went awry early in the pandemic, as researchers who were funded to study viruses with pandemic



It's ridiculous.
The lab escape
scenario
invokes an
accident, which
is the opposite
of a conspiracy
Nicholas Wade

potential launched a campaign labelling the lab leak hypothesis as a "conspiracy theory."

A leader in this campaign has been Peter Daszak, president of EcoHealth Alliance, a non-profit organisation given millions of dollars in grants by the US federal government to research viruses for pandemic preparedness. Over the years EcoHealth Alliance has subcontracted out its federally supported research to various scientists and groups, including around \$600 000 (£434 000) to the Wuhan Institute of Virology.

Shortly after the pandemic began, Daszak effectively silenced debate over the possibility of a lab leak with a February 2020 statement in the *Lancet*. "We stand together to strongly condemn conspiracy theories suggesting that covid-19 does not have a natural origin," said the letter, which listed Daszak as one of 27 coauthors. Daszak did not respond to repeated requests for comment from *The BMJ*.

"It's become a label you pin on something you don't agree with," says Nicholas Wade, a science writer who has worked at *Nature, Science*, and the *New York Times*. "It's ridiculous, because the lab escape scenario invokes an accident, which is the opposite of a conspiracy."

But the effort to brand serious consideration of a lab leak a "conspiracy theory" only ramped up. Filippa Lentzos, codirector of the Centre for Science and Security Studies at King's College, London, told the Wall Street Journal, "Some of the scientists in this area very quickly closed ranks." She added, "There were people that did not talk about this, because they feared for their careers. They feared for their grants."

Daszak had support. After he wrote an essay for the *Guardian* in June 2020 attacking the former head of MI6 for saying that the pandemic could have "started as an accident," Jeremy Farrar, director of the Wellcome Trust and co-signer of the *Lancet* letter, promoted Daszak's essay on Twitter, saying that Daszak was "always worth reading."

Daszak's behind-the-scenes role in orchestrating the statement in the *Lancet* came to light in November





Peter Daszak comes under Chinese media scrutiny while on WHO's fact finding trip to Wuhan



Some of the scientists in this area very quickly closed ranks Filippa Lentzos



"Conspiracy theory" is a useful term for defaming an idea you disagree with Richard Ebright

2020 in emails obtained through freedom of information requests by the watchdog group US Right To Know.

"Please note that this statement will not have EcoHealth Alliance logo on it and will not be identifiable as coming from any one organization or person," wrote Daszak in a February email, while sending around a draft of the statement for signatories. In another email, Daszak considered removing his name from the statement "so it has some distance from us and therefore doesn't work in a counterproductive way."

Several of the 27 scientists who signed the letter Daszak circulated did so using other professional affiliations and omitted reporting their ties to EcoHealth Alliance.

For Richard Ebright, professor of molecular biology at Rutgers University in New Jersey and a biosafety expert, scientific journals were complicit in helping to shout down any mention of a lab leak. "That means *Nature*, *Science*, and the *Lancet*," he says. In recent months he and dozens of academics

have signed several open letters rejecting conspiracy theory accusations and calling for an open investigation of the pandemic's origins.

"It's very clear at this time that the term 'conspiracy theory' is a useful term for defaming an idea you disagree with," says Ebright, referring to scientists and journalists who have wielded the term. "They have been successful until recently in selling that narrative to many in the media."

The *Lancet*'s editor in chief, Richard Horton, did not respond to repeated requests for comment but, after *The BMJ* had sent him questions, the *Lancet* expanded Daszak's conflicts of interest on the February statement and recused him from working on its task force looking into the pandemic's origin.

The Lancet letter ultimately helped to guide almost a year of reporting, as journalists helped to amplify Daszak's message and to silence scientific and public debate. "We're in the midst of the social media misinformation age, and these rumours and conspiracy

theories have real consequences," Daszak told *Science*. Months later in *Nature*, he again criticised "conspiracies" that the virus could have come from the Wuhan Institute of Virology and complained about "politically motivated organisations" requesting his emails.

That summer Scientific American, one of the oldest and best known popular science magazines in America, published a complimentary profile of Daszak's colleague, Shi Zhengli, a centre director at the Wuhan Institute of Virology, which has been funded by EcoHealth Alliance.

EcoHealth Alliance and the Wuhan Institute of Virology earned additional sympathetic reporting after the US National Institutes of Health (NIH) cancelled its grant to EcoHealth Alliance in April last year—allegedly on President Trump's order—because of its ties to Wuhan, a decision protested by 77 Nobel laureates and 31 scientific societies. (The NIH has subsequently awarded EcoHealth Alliance new funding.)



Efforts to characterise the lab leak scenario as unworthy of serious consideration were far reaching, sometimes affecting reporting that had first appeared well before the covid-19 pandemic. For example, in March 2020 *Nature Medicine* added an editor's note ("Scientists believe that an animal is the most likely source of the coronavirus") to a 2015 paper on the creation of a hybrid version of a SARS virus, co-written by Shi.

Wade explains, "Science journalists differ a lot from other journalists in that they are far less sceptical of their sources and they see their main role as simply to explain science to the public." This, he says, is why they began marching in unison behind Daszak.

The U turn

By the end of 2020, just a handful of journalists had dared to seriously discuss the possibility of a lab leak.

Shi Zhengli, a centre director at the Wuhan Institute of Virology In September, *Boston* magazine reported on a preprint that found the virus unlikely to have come from the Wuhan seafood market, as Daszak has argued, and that it seemed too well adapted to humans to have arisen naturally. However, the story failed to garner much attention, similarly to a little noticed investigative report by the Associated Press in December that exposed how the Chinese government was clamping down on research into covid-19's origins.

In January this year, New York magazine ran a sprawling story detailing how the pandemic could have started with a leak from the lab in Wuhan. The hypothetical scenario: "SARS-CoV-2, the virus that causes covid-19, began its existence inside a bat, then it learned how to infect people in a claustrophobic mine shaft, and then it was made more infectious in one or more laboratories, perhaps as part of a scientist's well-intentioned but risky effort to create a broad-spectrum vaccine." Scientists and their media allies swiftly criticised the article.

But mainstream outlets from the *New York Times* to the *Washington Post* are now treating the lab leak hypothesis as a worthy question, one to be answered with a serious

2019

SEPTEMBER

• Weeks before the pandemic erupts, Jeremy Farrar (Wellcome Trust) and Anthony Fauci (US NIH) help oversee a WHO report highlighting an "increasing risk of global pandemic from a pathogen escaping after being engineered in a lab"



WINAN INSTITUTE OF VIENCES, CS.

NOVEMBER

• Three researchers from the Wuhan Institute of Virology are admitted to hospital, says a previously undisclosed US intelligence document reported by the Wall Street Journal on 23 May 2021

31 DECEMBER

• China notifies WHO of "cases of pneumonia of unknown aetiology" in Wuhan City

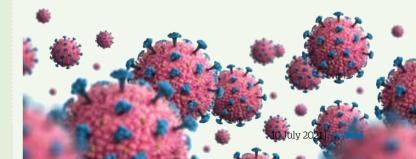
2020

• A commentary from

Chinese researchers based in Wuhan, arguing that "the killer coronavirus probably originated from a laboratory in Wuhan," is posted and later removed from ResearchGate (the user account "Botao Xiao" is also deleted)

19 FEBRUARY

- An open letter is published in the *Lancet* from 27 scientists including Peter Daszak and Farrar, who "strongly condemn conspiracy theories suggesting that covid-19 does not have a natural origin"
- Science reports: "Scientists 'strongly condemn' rumors and conspiracy theories about origin of coronavirus outbreak," quoting Daszak as saying, "We're in the midst of the social media misinformation age, and these rumors and conspiracy theories have real consequences, including threats of violence that have occurred to our colleagues in China"



investigation. In a recent interview with the *New York Times*, Shi denied that her lab was ever involved in "gain of function" experiments (see box) that enhance a virus's virulence. But the newspaper reported that her lab had been involved in experiments that altered the transmissibility of viruses, alongside interviews with scientists who said that far more transparency was necessary to determine the truth of SARS-CoV-2's origins.

Two major events are probably responsible for the media's change in tune. First, Trump was no longer president. Because Trump had said that the virus could have come from a Wuhan lab, Daszak and others used him as a convenient foil to attack their critics. But the framing of the lab leak hypothesis as a partisan issue was harder to sustain after Trump left the White House.

Second, after months of negotiation the Chinese government finally allowed the World Health Organization to come to Wuhan and investigate the pandemic's origin. But in January 2021 WHO, which included Daszak on the team, returned with no evidence that the virus had arisen through natural spill-over. More worryingly, members were allowed only a few hours of

WHO returned from China with no evidence that the virus had arisen through natural spill-over

What is "gain of function" research?

After two teams genetically tweaked the H5N1 avian flu virus in 2011 to make it more transmissible in mammals, biosafety experts voiced concerns about "gain of function" research—experimental research that involves altering microbes in ways that change their transmissibility, pathogenicity, or host range.

In the *Bulletin of the Atomic Scientists* in 2012, Lynn Klotz predicted an 80% chance that a leak of a potential pandemic pathogen would occur sometime in the next 12 years. Two years later a Harvard epidemiologist, Marc Lipsitch, founded the Cambridge Working Group to lobby against such experiments.

At that time, three safety lapses involving dangerous pathogens led to a safety crackdown at the US Centers for Disease Control and Prevention. Lipsitch later argued in 2018 that the release of such a pathogen would "lead to global spread of a virulent virus, a biosafety incident on a scale never before seen."

Gain of function research was briefly paused because of these concerns, although critics debate as to when it restarted. For more than a decade, scientists at the Wuhan Institute of Virology have been discovering coronaviruses in bats in southern China and bringing them back to their lab for gain of function research, to learn how to deal with such a deadly virus should it arise in nature.

The closest known relative of the SARS-CoV-2 virus was found in a region of China almost 1000 miles from the Wuhan Institute of Virology—yet the pandemic apparently started in Wuhan. Biosafety experts have noted that lab leaks are common but rarely reported, as hundreds of lab accidents had happened in the US alone.

supervised access to the Wuhan Institute of Virology.

The White House then released a statement making clear that it did not trust China's propaganda denying that the virus could have come from one of the country's labs. "We have deep concerns about the way in which the early findings of the covid-19 investigation were communicated and questions about the process used to reach them," said the statement. "It is imperative

that this report be independent, with expert findings free from intervention or alteration by the Chinese government."

The following month the Washington Post editorial board called for an open and transparent investigation of the virus's origins, highlighting Shi's experiments with bat coronaviruses that were genetically very similar to the one that caused the pandemic. It asked, "Could a worker have gotten

24 APRII.

• NIH abruptly cuts funding to EcoHealth Alliance, allegedly on Trump's order

28 APRIL

• Three former US intelligence agents write in Foreign Policy asking whether the virus emerged from nature or escaped from a Chinese lab

21 MAY

• New York Times depicts the Wuhan Institute of Virology as a victim of "conspiracy theories"

The New York Times

nature

27 MAY

• Nature reports the lab leak hypothesis as "coronavirus misinformation" and "false information"

UNDARK

8 JUNE

 The science magazine Undark reports that the lab leak is a conspiracy theory "that's been broadly discredited"

30 DEC

 Associated Press investigation finds documents from March 2020 showing how Beijing has shaped and censored research into the origins of SARS-CoV-2

2021 FEBRUARY

• Facebook places warning on an article by Ian Birrell about the origins of covid-19. Facebook says that these warnings reduce article viewership by 95%

13 FEBRUARY

• Jake Sullivan, US national security adviser, expresses "deep concerns" about WHO's covid-19 investigation, calling on China to be more transparent

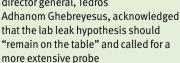


MARCH

• Washington Post calls for serious investigations of the lab leak hypothesis

30 MARCH

• WHO releases a report on its investigation into the origins of covid-19, listing the lab leak as least likely of the possible scenarios considered. Hours earlier, WHO's director general, Tedros



• The US, Australian, Japanese, Canadian, UK, and other governments express concern over WHO's investigation and call for "transparent and independent analysis and evaluation, free from interference and undue influence"



infected or inadvertent leakage have touched off the outbreak in Wuhan?" The Wall Street Journal, citing a US intelligence document, recently reported that three Wuhan Institute of Virology researchers were admitted to hospital in November 2019.

To follow any US financial ties and to better understand how the pandemic started, Republicans have launched investigations of government agencies that fund coronavirus research, and one investigative committee has sent a letter to Daszak at EcoHealth Alliance demanding that he turn over documents. Meanwhile, Senate Republicans and Democrats have started to discuss an independent investigation of the virus's origins.

A hard truth to swallow

The growing tendency to treat the lab leak scenario as worthy of serious investigation has put some reporters on the defensive. After Robert Redfield, former director of the Centers for Disease Control and Prevention, appeared on CNN in March, Scientific American's editor in chief, Laura Helmuth, tweeted, "On CNN, former CDC director Robert Redfield shared the conspiracy theory that the virus came from the Wuhan lab." The following day, Scientific American ran an essay calling the lab leak theory "evidence free." And a week later a Nature reporter, Amy Maxmen, labelled the idea as "conjecture."

Helmuth did not respond to questions from *The BMJ*.

Some media outlets have attempted to justify their past reporting about the lab leak hypothesis as simply a matter of tracking a "scientific consensus" which, they say, has now changed. *Vox* posted an erratum noting, "Since this piece was originally published in March 2020, scientific consensus has shifted."

The "scientific consensus" argument does not sit well with David Relman, a microbiologist at Stanford University, California. "We can't even begin to talk about a consensus other than a consensus that we don't know [the origins of SARS-CoV-2]," he recently told the Washington Post.

A year lost

While the narrative took months to change in the media, several high profile intelligence sources had treated the lab leak theory seriously from early on. In April 2020, Avril Haines joined two other former deputy directors of the Central Intelligence Agency to write an essay in *Foreign Policy* asking, "To what extent did the Chinese government misrepresent the scope and scale of the epidemic?" A week later, one of the former intelligence officials who wrote that essay gave similar quotes to *Politico*.

Ignoring these early warnings led to a year of biased, failed reporting, says Wade. "They didn't question



The only consensus is we don't know the origins of SARS-CoV-2 David Relman



The Chinese government has got to be transparent Francis Collins

what their sources were saying," he says of the reporters who helped to sell the conspiracy theory narrative to the public. "That is the simple explanation for this phenomenon."

An impartial, credible investigation?

As the news media scramble to correct and reflect on what went wrong with nearly a year of reporting, the episode has also highlighted quality control issues at the ubiquitous "fact checking" services.

Prominent outlets such as *PolitiFact* and FactCheck.org have added editor's notes to pieces that previously "debunked" the idea that the virus was created in a lab or could have been bioengineered—softening their position to one of an open question that is "in dispute." For almost a year Facebook sought to control misinformation by banning stories suggesting that the coronavirus was man made. After renewed interest in the virus's origin, Facebook lifted the ban.

Whether a credible investigation will be made into the lab leak scenario remains to be seen. WHO and the *Lancet* both launched investigations last year, but Daszak was involved in both, and neither has made significant progress.

In recent weeks, several high profile scientists who once denigrated the idea that the virus could have come from a lab have made small steps into demanding an open investigation of the pandemic's origin.

The NIH's director, Francis Collins, said in a recent interview, "The Chinese government should be on notice that we have to have answers to questions that have not been answered about those people who got sick in November [2019] who worked in the lab and about those lab notebooks that have not been examined." He added, "If they really want to be exonerated from this claim of culpability, then they have got to be transparent."

But the nature of this investigation has still not been decided.

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