this week

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Staff bullying costs NHS £2bn a year

Staff who continue to work while suffering the effects of being bullied cost the NHS £604m a year in mistakes and lower productivity

The consequences of bullying and harassment cost England's NHS at least £2.28bn a year, an analysis indicates.

Researchers used data from NHS Digital to gauge the impact of bullying on sickness absence, turnover, productivity, sickness presenteeism, and employment relations. The authors described the final £2.28bn figure as an "extremely cautious" estimate, as several costs lack reliable evidence.

The analysis, published in the journal *Public Money and Management*, estimated that sickness absence due to bullying costs £483.6m a year. This assumes that the 24% of NHS staff who are bullied will "conservatively" take 71% more time off (seven days a year) on top of the average 9.36 sick days. The average daily pay rate of the 1.046 million NHS staff is £140.12.

Absences are estimated to cost an additional 62.5% (£302.2m) on top of absentees' salaries. This cost largely reflects cover from agency staff and overtime.

The cost of "presenteeism"—the productivity lost when staff continue to work while being bullied and are more prone to making mistakes—was estimated at £604.4m.

Of the 24% of NHS staff who reported being bullied, an estimated 15% (3.6% of staff overall) left their jobs. The cost of replacing each of them is £5614.00—a total of £231.9m. The reduced productivity of replacement staff is estimated to cost £13 489 each (£575.7m overall.)

Annual industrial relations, litigation, and compensation costs from bullying and harassment are estimated at £83.5m. This is based on a predicted 8.5 cases a year at each of the 234 NHS organisations, each costing an average of £41 963.

The authors suggest improving staff surveys to better capture the types of behaviours described as bullying and to understand how staff feel about procedures to tackle the problem. With a better idea of the effectiveness of current strategies, better methods could be developed, they say.

Duncan Lewis, professor of management at Plymouth University and one of the authors, said, "Research has increasingly demonstrated the risks to patient care and safety but not addressed the cost to the organisational effectiveness of the NHS. We hope this study kickstarts serious attention to the substantial diversion of funding away from patient care that current levels of bullying cause."

Ingrid Torjesen, London

Cite this as: *BMJ* 2018;363:k4463

LATEST ONLINE

- Institute withdraws peer's invitation over "allegations of anti-Semitic sentiment"
- Cardiologist is struck off after unwanted sexual advances towards student
- Cannabis: Canada experiences queues and shortages as it legalises recreational use

SEVEN DAYS IN

Number of GP trainees in England rises by 14%, surpassing HEE target

REX

The number of doctors entering GP training in England this year has surpassed the target set by Health Education England by more than 200.

HEE said that 3473 trainees were starting GP training this year, against a recruitment target of 3250, a 14% increase on last year.

Speaking at the National Association of Primary Care conference last week the health secretary, Matt Hancock, said that many GPs were retiring early or opting to work part time, "which makes the challenge of increasing the number of GPs even greater." On the government's target to recruit extra GPs by 2020, he said, "We have set a goal of getting 5000 more doctors into general practice . . . We must reach it."

He added that a culture shift was needed in the way GPs were valued. "Being a general practitioner should have the same prestige as being a consultant or a surgeon," he said, "because GPs are the bedrock of the NHS."

Krishna Kasaraneni, workforce lead for the BMA's General Practitioners Committee, said the progress was encouraging. "At the same time, we know that more doctors are leaving the profession due to pressures in general practice, from unmanageable workload to increased bureaucracy and rising indemnity costs," he said. "While the health secretary again promises an extra 5000 GPs, the government continues to push the deadline for achieving this back as numbers dwindle."

Abi Rimmer, *The BMJ* Cite this as: *BMJ* 2018;363:k4437

Research fraud

Journal retracts article from stem cell researcher

The *NEJM* has retracted one paper and issued an "expression of concern" about two others within days of Harvard Medical School and Brigham and Women's Hospital announcing they had asked various journals to retract 31 papers from a laboratory once hailed for pioneering stem cell research but now discredited by findings of research misconduct. The articles came from the laboratory of Piero Anversa, who came to prominence when he appeared to produce evidence for his long standing contention that science had underestimated the heart's capacity for self repair. Anversa stands by his findings.

Life sciences

Hard Brexit could cripple UK science, says the Crick

The Francis Crick Institute warned about a "no deal" Brexit, as a survey of over 1000 staff found that 97% of scientists believed that a hard Brexit would be bad for UK science, and only 10% were confident in its future. Only 4% thought that the government was committed to getting a good deal for science, and only 3% thought that the scientific community was being listened to.

Virginity testing

UN agencies call for ban on humiliating practice

"Virginity testing" must end, said UN Human Rights, UN Women, and the World Health Organization, calling the practice medically unnecessary, often painful, humiliating, and traumatic. It is often performed by inspecting the hymen for tears or its size of opening or by inserting fingers into the vagina (the "two finger" test). It is used in at least 20 countries, although WHO states that neither method can prove whether a woman or girl has had vaginal intercourse.

United States

LA sets up taskforce to tackle typhus outbreak

Los Angeles, a city known for its wealth and movie star residents, set up a dedicated taskforce to fight an outbreak of the flea-borne illness typhus, a disease linked to extreme poverty. The taskforce will target the city's large homeless population, which numbers around 53 000 and is centred on the neighbourhood of Skid Row. At least 64 cases of typhus have been reported in the county of Los Angeles this year, after 67 last year. The typhus outbreak began with 11 patients in the centre of the city, six of whom were homeless.

TV drug adverts will include prices

A legal and political battle is brewing as the US government plans to require drug advertisements on television to display the list price of a 30 day course. Pharmaceutical Research and Manufacturers of America (PhRMA) proposed a compromise measure just before the health secretary, Alex Azar (left), gave a speech to the National Academy of Medicine. PhRMA's president, Steve Ubl, said that the industry would voluntarily change its advertisements from next April to add messages directing consumers to company websites with pricing information. But Azar said that "placing information on a website is not the same as putting it right in an ad."

Winter pressures

MPs slam 25% uptake of flu vaccine by social care staff

MPs criticised the low uptake of flu vaccination among staff in social care settings, putting it at around 25% at best—far lower than among frontline NHS staff. The House of Commons Science and Technology Committee carried out an inquiry into uptake after a high flu burden in 2017-18, numerous hospital admissions, and evidence of variable uptake of the flu vaccine. In announcing the outcome of its inquiry the committee said that 100% coverage should be expected among social care staff.

MEDICINE

Winter could be worse than 2017, trusts warn
Hospitals warned that this winter could be even more difficult than last year as trusts continue to grapple with high demand, workforce pressure, and fragile social and primary care. NHS Providers, the body representing NHS trusts, said in a report that reductions in delayed transfers of care for patients who were ready to leave hospital, and the potential for a less severe flu season this year, were not enough to mitigate other pressures.

Sexual health

HIV decreases with PrEP roll-out in Australia

HIV diagnoses in men who have sex with men fell by 25% in the first year after the roll-out of pre-exposure prophylaxis (PrEP) in New South Wales, Australia, by which time about 20% of HIV negative gay men were receiving PrEP. Results reported in the *Lancet HIV* showed that new HIV diagnoses in the state dropped from 295 in the 12 months before PrEP to 221 the year after, the lowest level since HIV surveillance started in 1985.

Budget

Health organisations urge chancellor to invest
A coalition of royal colleges and health faculties urged the UK chancellor, Philip Hammond, to use the autumn budget to deliver long term investment in adult social care, public health services, and the NHS workforce. A joint letter by the group, which includes the Royal College of Physicians and Royal College of Surgeons, warned Hammond that, unless he builds on the NHS funding settlement in the budget, plans for truly integrated care will not be possible and the demand on NHS services will not be manageable.

MPs call for 10 year social care plan
The government should produce a fully costed 10 year plan for social care to run alongside the imminent NHS long term plan, said MPs on the Public Accounts Committee. Despite around 20 years of efforts to ensure closer integration of health and social care the two areas were still too disparate and lacking in coordination of services, the MPs' report said, and the government still lacked an effective overall strategy to achieve effective integration of the two sectors.

Illegal drugs

UN strategy is branded colossal failure
The United Nations' 10 year global strategy to eradicate the illegal drug market by 2019 has been "a spectacular failure of policy" and needs a radical rethink, the International Drug Policy Consortium said. Its report noted a 145% increase in drug related deaths and found that at least 3940 people had been executed for drug offences over the past decade. A fifth of prisoners are in custody for drug offences (mostly possession for personal use), it added, and restrictions in access to controlled medicines have left 75% of the world's population without proper access to pain relief.

Cite this as: *BMJ* 2018;363:k4448

STABBINGS

The number of patients treated for life threatening knife injuries increased by **34%** from 1697 to 2278 between 2015-16 and 2017-18, showed figures from nine of England's 11 major trauma centres *[Guardian]*

SIXTY SECONDS ON . . . HOSPITAL CAR PARKING

IT'S TERRIBLE. WHAT'S NEW?
NHS Digital has published data showing exactly how much money hospitals in England make from car parks. Last year NHS trusts made £69.5m from charging staff and a further £156.8m from patients and visitors.

THAT'S SOME VIOLATION
It does seem rather a lot, although the charges vary by hospital. For example, it costs staff £2 an hour to park at the Royal Free in London, while at the Queen Victoria Hospital in East Grinstead and Colchester Hospital University it's a steal at 1 p an hour. And some sites don't charge at all.

DID IT SEND DOCTORS INTO A TAILSPIN?
Yes, though they've been complaining about it for years. Chaand Nagpaul, the BMA's chair of council, said it was "unacceptable" that NHS staff are expected to pay what can be "extortionate" charges, particularly given that many have to work long hours and night shifts.

WHY DO THEY CHARGE AT ALL?
It's all about the money. In the context of financial pressures, NHS Improvement said it was appropriate for trusts to develop their "commercial income opportunities."

BUT ISN'T IT FREE IN WALES?
Yes, although for a while it looked like they had parked the issue. The Welsh government first announced in 2008 that patients, staff, and visitors would be able to park for free by the end of 2011. Eventually, in September 2018 parking became free.

HARDLY PUT THEIR FOOT DOWN, THEN?
No. And in a response to a petition launched earlier this year calling for charges in England's hospitals to be scrapped, the Department of Health cited Wales's problems with free parking, such as illegitimate use and a lack of spaces. "Having a parking regime prevents these problems," it argued.

ANY CHANCE OF A U TURN?
It seems unlikely. In its response to the petition the department effectively put the brakes on any changes, arguing that removing charges would mean "losing over £200m from patient care budgets, and result in fewer spaces for genuine users."

Abi Rimmer, *The BMJ*

Cite this as: *BMJ* 2018;363:k4447

FIVE IMPROVEMENTS TO THE JUNIOR DOCTOR CONTRACT

Since August the BMA has been working with NHS Employers and the Department of Health and Social Care for England to review the 2016 junior doctor contract. As part of the process the BMA says it has secured commitments from the government on several areas

1 PAY The pay linked to evening and weekend working will be reconsidered, and the potential for new additional "outside of the envelope" funding will be part of the discussion. This will focus on pay for junior doctors who work the most weekends.

2 WORKING HOURS The BMA said that the pay discussions will have a strong focus on safety and training. There will also be an emphasis on ensuring that exception reporting—which allows junior doctors to raise an alert when their actual hours vary significantly or regularly from their scheduled hours—works, so that juniors don't miss out on training and aren't overworked because of service pressure.

3 BETTER WORKING LIVES Health Education England will look at how to accelerate training related improvements through its programme to enhance junior doctors' working lives. Earlier this year the BMA said this programme had initiated the most important changes to postgraduate medical training for years.

4 ROTA GAPS In the future all NHS trusts must publish a consolidated annual report on rota gaps and a plan setting how they can reduce them. The plan would need to be signed off by the chief executive of every trust and would be publicly available, the BMA said. It also said that all trusts would implement more flexible e-rostering for juniors to improve their work-life balance.

5 EXTRA FUNDING The BMA said that £10m will be made available to hospitals through trusts' guardians of safe working and local junior doctors forums. This money will be specifically allocated to improving junior doctors' working conditions through workplace facilities and resources.

Abi Rimmer, *The BMJ*

Cite this as: *BMJ* 2018;363:k4450

Chinese vaccine maker fined £1bn for violations

Chinese authorities have imposed an unprecedented fine of ¥9.1bn (£1bn) on one of the country's biggest vaccine makers and removed its permit to produce drugs in an effort to reassure the public, after a defective rabies vaccine set the country's social media ablaze this summer.

The hashtag #Changsheng vaccine case# was viewed more than 470 million times in two weeks in July after news that 15 people had been detained following a surprise inspection of the facilities of Changchun Changsheng Life Sciences. Among them was the chairwoman and owner, Gao Junfang.

The government's action was accompanied by widespread censorship of online and media criticism, the arrest of activists, and apparent intimidation of parents who said that their children had been harmed by the vaccine.

Announcing the fine, China's National Medical Products Administration (NMPA) said the company had mixed vaccines then given them fake batch numbers, used expired stock solution, failed to test for potency, secretly changed its centrifuge, destroyed some records and fabricated others, and submitted false information to regulators. The violations date back to 2014.

Defective doses

At first the NMPA said the defective vaccines had not left the facility. It later acknowledged that 244 000 doses had been sold to Shandong province's Centre for Disease Control. This figure was later revised to 498 000 doses. A smaller number went to Anhui province. Changsheng also sold 253 000 ineffective but otherwise harmless diphtheria-tetanus-pertussis vaccines, the NMPA added.

More than 40 officials have been sacked or disciplined. A director of the Shandong Institute of Disease Control and Immunisation committed suicide within days of the scandal breaking.

The case drew a rare intervention from President Xi Jinping, who ordered further

Hospitals told to identify contracts that could be affected by a "no deal" Brexit

The health secretary has told NHS hospitals in England to draw up a list of all contracts that could be affected in the event of the UK failing to negotiate a deal to exit from the EU.

In a 12 October letter to NHS trust chief executives and heads of procurement, Matt Hancock (below) instructed them to provide a list of contracts in which the supply chain was likely to be "highly impacted" by a no deal exit, and a plan to mitigate them by 30 November.

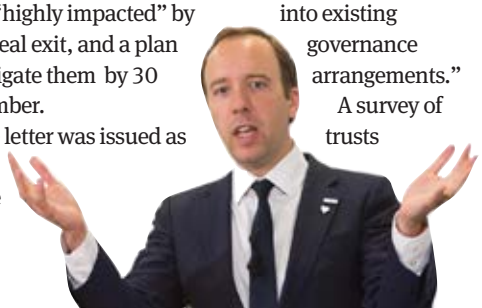
The letter was issued as MPs on the Public Accounts Committee warned they were concerned that the health department could not assure them of plans to safeguard the supply of drugs after Brexit.

Prioritise

In his letter Hancock told chief executives, "Please ensure your staff prioritise this appropriately, and that updates are incorporated into existing governance arrangements."

A survey of trusts by the website Politico showed most had yet to formalise contingency plans for a no deal future.

Martin McKee, professor of European public health at the London School of Hygiene and Tropical Medicine, told *The BMJ* it could be a "monumental task" for trusts to audit all their contracts in six weeks. He added that the stalled Brexit talks and the lack of clarity about the future made it difficult to draw up contingency plans: "There are so many unanswered questions."



Gareth Iacobucci, *The BMJ*

Cite this as: *BMJ* 2018;363:k4426

dismissals. Six NMPA officials were dismissed as local governments and the NMPA were called on to engage in "profound self criticism."

Xi also said that the public deserved a full explanation of events but has imposed a blanket of censorship strict even by Chinese standards. Censors have deleted tens of millions of posts containing the word "vaccine."

Claims of paralysis

It is not known if patients have been harmed by the vaccines. Journalists from Taiwan and other foreign sources have had little trouble finding parents who say their children were injured. Some allege paralysis and mention diagnoses including acute disseminated encephalomyelitis and "grey matter spondylitis."

The government has said that no children were harmed, but did not mention adults. Yet in announcing the company fine, it also revealed a compensation fund for people harmed by the rabies vaccine. Compensation runs from ¥100 000 for less serious harm to ¥650 000 for death. The applicant questionnaire suggests that anaphylaxis is the expected mechanism of injury.

More than 40 officials have been sacked or disciplined

There have been regular pickets outside the NMPA in Beijing by people who say they or their children were harmed. A group of nearly 100 parents who called a Beijing press conference in August suddenly cancelled, and several told Radio Free Asia that they were not free to explain why.

Chinese health authorities have struggled to regain the public's trust since 2008 when the government tried to conceal illness in 300 000 infants caused by baby formula that had been deliberately tainted with melamine.

Many online commentators noted—before being deleted—that the degree of severity shown to Changsheng had not been levelled at China's biggest vaccine maker, the state owned Wuhan Institute of Biological Products, which last year was found to have sold 400 000 ineffective DTP vaccines.

China is the world's largest vaccine producer with an annual production capacity of more than a billion doses. Parents are legally obliged to observe official vaccination schedules.

Owen Dyer, Montreal

Cite this as: *BMJ* 2018;363:k4420

BMJ Awards: nominations open with six new categories

Nominations opened on 22 October for The BMJ Awards 2019, celebrating outstanding achievement in medicine.

Doctors have until Friday 18 January to put themselves—or colleagues—forward in 15 categories across a range of specialties in the UK's leading medical awards. They aim to recognise the inspirational work of healthcare teams across the country and promote excellence in healthcare.

The award winners will be announced at a ceremony on Wednesday 24 April after a rigorous judging process in which shortlisted teams present their work and answer questions from a panel of expert judges, including a patients' representative.

Fiona Godlee, *The BMJ*'s editor in chief, said that she was proud to be celebrating medical excellence in the 11th year of the awards.

Dedication

"Given the immense pressures facing the NHS, it is more important than ever to honour the hard work and dedication that goes in to improving the quality of care in our health service," Godlee said.

"The awards celebrate the innovation and creativity of teams, often working in challenging circumstances. We hope that entering the awards can provide an energising boost to staff morale."

Navjoyt Ladher, head of scholarly comment at *The BMJ* and the editorial lead for the awards, said, "In light of the overwhelmingly positive feedback from entrants about how useful and rewarding the experience was this year, we plan to continue and develop the format for 2019.

"We recognise what a unique opportunity the awards offer for clinical teams from across the country to showcase their fantastic achievements, learn from one another, and network."

To apply and for more information go to https://thebmjawards.bmj.com.

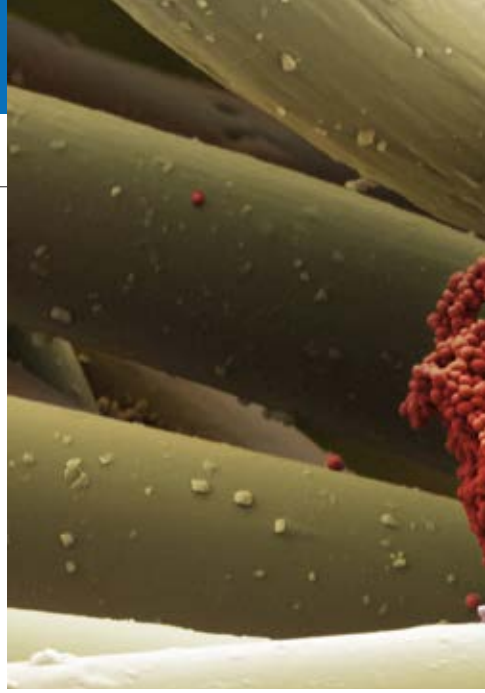
Susan Mayor, London

Cite this as: *BMJ* 2018;363:k4434

2019 AWARD CATEGORIES

- Care of the older person—sponsored by Dunhill Medical
- Diabetes
- Digital innovation
- Innovation in quality improvement
- Prevention and lifestyle
- Stroke and cardiovascular
- Anaesthesia—sponsored by the Royal College of Anaesthetists
- Cancer care—sponsored by MacMillan
- Dermatology—sponsored by LEO
- Diagnostic team—sponsored by Alliance Medical
- Education team of the year
- Mental health
- Primary care team—sponsored by MDDUS
- Outstanding contribution to health
- UK research paper 2018

Antimicrobial resistance should be a top five priority, warn MPs



Modern medicine will effectively be lost if the government fails to take concrete action within six months to tackle antimicrobial resistance, MPs have warned.

A Health and Social Care Committee report, published on 22 October, said the government must make the issue a "top five policy priority" and must urgently improve the market for drug companies to focus on developing and introducing new antibiotics.

Growing threat

"Antimicrobial resistance (AMR) poses a grave threat to health," the committee warned. "Quite simply, if action is not taken to address this growing threat, we are told that modern medicine will be lost. By 2050 it is estimated that AMR will kill 10 million people per year, more than cancer and diabetes combined."

"Antimicrobial treatments make previously life-threatening illnesses such as TB, pneumonia and malaria treatable; they enable surgery to be carried out safely; make childbirth far safer; and protect cancer patients while their immune systems are weakened by chemotherapy."

The report said that without effective antimicrobial treatments the risk of death from infectious disease would become substantially higher. As well as firmly establishing it as a priority across government, "a dedicated budget should be made available to enable work in this area to make more rapid progress across all relevant departments," the MPs said.

Noting that no new classes of antibiotics had been developed for decades, the MPs emphasised that investment in basic scientific research was essential, as was investment by drug companies to develop and bring products to the market.

"In six months we want to see tangible progress on policies to reverse the worrying exodus from AMR research and development"
Sarah Wollaston, MP

PRIMARY CARE has reduced antibiotic prescriptions by 13% in the past five years

From 2015-16 to 2017-18, government funding for AMR research rose from £11.6m to £30.6m, boosting investment in the early research needed to discover new antimicrobials, said the committee. But the number of drug companies involved in further development and clinical trials to bring those new antimicrobials to the market had fallen over the same period.

As new antibiotics are prescribed sparingly during patent lives, reducing their profitability when compared with other medicines, it was essential to change patent law and the ways companies are reimbursed for new antimicrobials, the committee said.

Lawyer says gross negligence manslaughter law is flawed

Robert Francis: chair of the Mid Staffs inquiry

Norman Williams: chair, rapid policy review of GNM

The law on gross negligence manslaughter (GNM) is flawed because, unlike other areas of law, it asks a jury to decide what is or is not a criminal offence, the leading medical lawyer Robert Francis told members of parliament.

Francis, who chaired the Mid Staffordshire NHS Foundation Trust inquiry, was giving evidence to the Commons Health and Social Care Committee. It is looking at GNM after the case of trainee paediatrician Hadiza Bawa-Garba.

She was convicted of manslaughter after the death of 6 year old Jack Adcock from sepsis. A medical practitioners' tribunal suspended her for 12 months, but the GMC appealed to the High Court, which ruled she should be struck off. The Court of Appeal overturned the High Court and ruled the tribunal was correct to take account of systems failures at the hospital where she worked.

Norman Williams, former president of the Royal College of Surgeons and chairman of a government commissioned rapid policy review on GNM prosecutions, which reported in June, told MPs the review had concluded the law itself was appropriate. The problem was inconsistency in investigations and in how the law was applied.

The law on GNM requires a jury to decide whether the accused's behaviour was "truly exceptionally bad."

Inconsistency

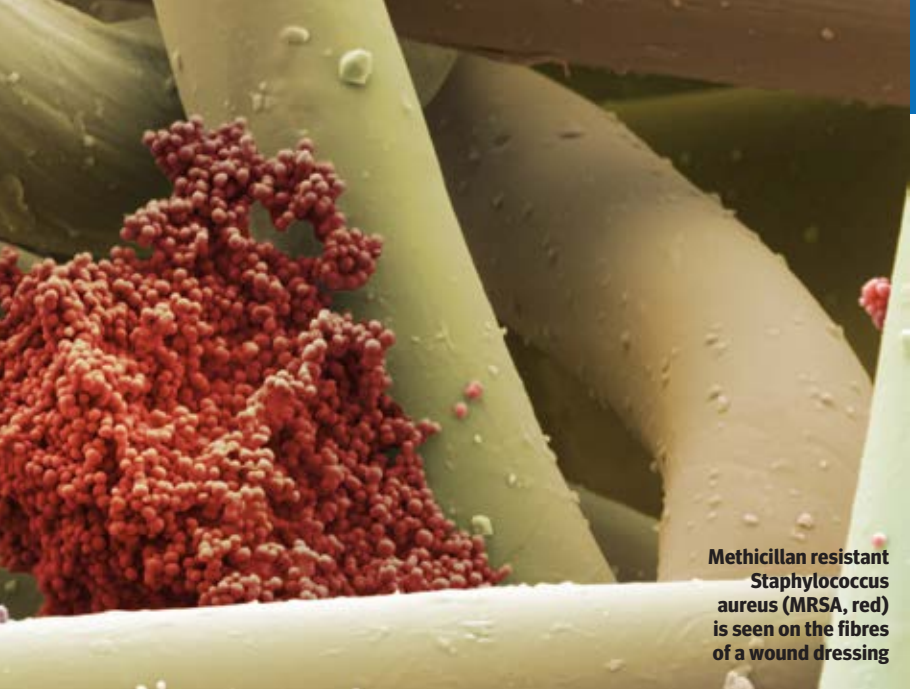
Francis said that was the one point on which he disagreed with Williams's report. "The law is the reason for the inconsistency," he said.

"How 'truly exceptionally bad' is defined is that it's so reprehensible as to justify a conclusion that it amounted to gross negligence and required a criminal sanction," he said. "In other words, the jury will in effect understand they're being asked to decide what is or isn't a criminal offence."

He said this flaw affected healthcare more than most because of the complexities of a case. Investigations in future needed to focus on the context in which practitioners were working and there had to be "an understanding of how those circumstances impact on people's ability to make rational decisions."

Clare Dyer, *The BMJ*

Cite this as: *BMJ* 2018;363:k4412



Methicillan resistant Staphylococcus aureus (MRSA, red) is seen on the fibres of a wound dressing

They added that changing prescribing patterns was also important, noting that prescribing levels in the UK were still around double those in the Netherlands, Sweden, and the Baltic states.

Less progress in secondary care

Primary care has reduced antibiotic prescriptions by 13% in the past five years, they said, but secondary care has shown less progress. The report recommended stricter prescription targets in primary care, as well as rapid review and withdrawal of unnecessary prescribing in secondary care.

Digital health tools for clinicians and policy makers could also help reduce the threat of AMR, the report argued. It recommended that a single organisation should be responsible for coordinating clinical decision support systems throughout the NHS and that prescribing of antimicrobials and other medicines should be prompt and evidence based.

Sarah Wollaston, the committee chair, said, "In six months we want to see tangible progress on implementing policies to reverse the worrying exodus from AMR research and development, and government and industry should play their part in tackling this issue."

Adrian O'Dowd, London

Cite this as: *BMJ* 2018;363:k4444

Pregabalin and gabapentin become class C drugs to cut overuse deaths

Pregabalin and gabapentin are to be reclassified as class C controlled substances from next April to reduce the growing number of deaths associated with their misuse.

Victoria Atkins, minister for crime, said, "Any death related to the misuse of drugs is a tragedy. We accepted expert advice and will change the law." Figures for England and Wales show that 190 deaths involving the drugs were registered in 2017. The number linked to pregabalin rose sharply from four in 2012 to 111 in 2016, while gabapentin deaths rose from eight to 59.

Prescription only

Both are prescription only drugs used for treating epilepsy, peripheral and neuropathic pain, and anxiety disorders. They are structurally related to the neurotransmitter γ-aminobutyric acid (GABA) and can cause elevated mood, particularly if mixed with other drugs.

The Advisory Council on the Misuse of Drugs raised concerns in 2016 about medical misuse, illegal diversion, and addiction to the drugs. It found that pregabalin prescribing had risen by 350% and gabapentin by 150% in the previous five years.

As class C drugs, doctors will have to sign prescriptions and not issue electronic scripts. And pharmacists will need to dispense the drugs within 28 days.

Susan Mayor, London

Cite this as: *BMJ* 2018;363:k4364

FIVE MINUTES WITH . . .

Anna Charles

The King's Fund senior adviser on why plans to integrate services are now less focused on bed numbers

"Our latest report looks at the progress of London's five sustainability and transformation partnerships (STPs). It was commissioned by the mayor of London and follows work we've done looking at all 44 STPs across England.

"The main message is that things have moved on since STP plans were first published in 2016. The perception then was that the plans had quite challenging assumptions around financial balance—and what that might mean for hospital services. The old report had some shocking numbers on what might happen to bed numbers, but we were told by the STPs, 'This isn't our focus.'

"NHS England and NHS Improvement have said that they don't expect STPs to deliver against the numbers in those initial plans. That leaves the question of what they are planning against. It's an unanswered question, as the new NHS funding settlement is still to be determined; but NHS England has asked STPs and integrated care systems (ICSs) to produce new five year plans by autumn 2019. If we look at what London STPs have been doing, it's been about relationship building and putting in place mechanisms by which those organisations can plan collectively.

IT'S ABOUT RELATIONSHIP BUILDING AND PUTTING IN PLACE MECHANISMS TO PLAN COLLECTIVELY

"From a clinician's point of view, STPs can seem remote—in London they cover up to two million people. One of the things we found is that STPs sit over the top of lots of local work that might feel more tangible to staff. So if you're working in a GP practice, you might start to see integrated community teams of GPs, district nurses, pharmacists, and social workers. The idea is that STPs sit above that, support it, and take on functions better done at larger scale.

"The big question is whether STPs or ICSs need to be recognised in statute: as long as they're voluntary, they're fragile. Potentially they will play an important role in determining public spending and how services are delivered, so there needs to be formal accountability."

Anna Charles is senior policy adviser to the chief executive at the King's Fund

Gareth Iacobucci, *The BMJ*

Cite this as: BMJ 2018;363:k4428

THE BIG PICTURE

Brexit warning for NHS at People's Vote march

Hundreds of health workers and patients rallied under NHS banners as part of the "NHS against Brexit" column in the People's Vote march in London on 20 October. Protesters demanded a new referendum on the final deal agreed for the UK's withdrawal from the EU. Banners highlighted the risks that Brexit could pose to healthcare, with BMA placards warning "Bad for health. Bad for patients. Bad for the NHS."

Tom Moberly, UK editor, *The BMJ*
Cite this as: *BMJ* 2018;363:k4470

RICHARD H SMITH

EDITORIAL

Global warming must stay below 1.5°C

The world is facing an emergency and we should organise accordingly

Twelve years to act, or we will face catastrophic climate change. This is the core message of the report from the Intergovernmental Panel on Climate Change (IPCC) released on 8 October.

The basis for this message is twofold. First, we have warmed the planet by 1°C above pre-industrial levels, with serious negative effects on people and ecosystems worldwide. Second, unless we reduce greenhouse gas emissions decisively over the next 12 years, we will extend warming beyond 1.5°C: the limit in the 2015 Paris agreement signed by 195 countries. For many ecosystems and populations, even this will fail to prevent disaster. However, the IPCC describes why any failure to meet this target would have catastrophic effects.

The science of anthropogenic global warming and its effects have been previously explained in *The BMJ*. The IPCC's new synthesis of more than 6000 scientific papers highlights again the dangers posed by global warming, including extreme weather events, rising sea levels, destruction of coral reefs, loss of biodiversity, ocean acidification and deoxygenation, and extreme heat. Crucially, climate change is a "threat multiplier" that exacerbates and intensifies poverty, food insecurity, water stress, forced migration, and conflict.

We do not have time to effect change through the usual processes of education, research, or gentle lobbying

The report contrasts the effects of 1.5°C and 2°C warming. It predicts a difference of 10 cm in sea level and 10.4 million displaced people by 2100, and a difference of 190 million premature deaths and hundreds of millions of people forced into poverty by 2050. The IPCC also discusses what is required to limit warming to 1.5°C. Its conclusion is stark: we must cut CO_2 emissions by at least 45% in the next 12 years compared with 2010 levels and achieve net zero CO_2 production by 2050. This is a tall order, requiring action on multiple fronts at all levels of society—both local and global.

Political compromise

Furthermore, despite the clear note of alarm, the report should be viewed as conservative and the result of political compromise. It does not acknowledge the possibility that plausible feedback loops may result in unpreventable global warming; nor does it mention the political obstacles caused by rising levels of anti-global nationalism or the presence of climate change denialists in some governments, including the US and Australia.

The underlying message remains clear and consistent with previous reports. We need to decarbonise our energy system and change how we feed, heat, and transport ourselves. We need major programmes of reforestation and technologies to remove CO_2 from the atmosphere. We must recognise that the poorest populations who are at greatest risk have contributed least to climate change. The 10% of the global population responsible for 50% of carbon emissions bears a particular responsibility.

Despite past warnings and the euphoria around the Paris agreement, global energy related carbon emissions rose to an all-time high in 2017, after three years of being flat. Meanwhile, some industrialised countries, including England, are encouraging more exploration and extraction of fossil fuels instead of committing to renewable energy and energy conservation.

So, what can be done in the face of powerful lobby groups with a vested interest in oil and gas, politicians driven by short term electoral cycles, and populations habituated to fossil fuels' conveniences and benefits?

Although government action is crucial, so is civic action. In particular, doctors and other health professionals have a strong record of steering society to make difficult, unpopular, and at times expensive choices for the sake of public health and safety. This has historically included improved sanitation, housing, water treatment, and air quality and, in the 1980s, reducing the risks of nuclear war.

But we do not have time to effect change through the usual processes of education, research, or gentle lobbying. We need to organise as we would in emergencies. We must also step out of our comfort zones—individually and collectively—to effect social, political, and economic change. We must enlist our most politically and culturally influential figures and speak to the public, the government, and the media. We can lead by example by ensuring our professional organisations divest immediately from fossil fuels. And through our work, we should mobilise patients and communities to demand and implement change. *Global Warming of 1.5°C* is a clear call to action. What are you going to do?

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EDITORIAL

Stalling life expectancy in the UK

We must look at austerity and beyond for underlying causes

The stalling of improvements in life expectancy in the UK since 2011, highlighted again in the most recent data, has prompted much comment and speculation about the causes. Longevity is the ultimate measure of health, and the flatlining of life expectancy after decades of steady improvement has unsurprisingly led to calls for action. The Department of Health and Social Care has belatedly commissioned a review by Public Health England (PHE).

The negative effect of post-2008 "austerity" on health, social care, and other public spending is cited as a potential cause in studies examining temporal associations between mortality trends and markers of NHS performance and public spending. Other features of this complex mortality story also warrant consideration, including the parallels with what is happening elsewhere.

The UK's life expectancy is below that of many comparator countries, especially for women

International parallels

Several high income countries have seen a slowdown in longevity improvements since 2010. As in the UK, the slowdown is greater at older ages, especially among women, and is driven by some similar causes of death (although the contribution of opioids to falling life expectancy in 2015 and 2016 is so far unique to the US). Two parallel but distinct developments warrant further consideration: an underlying deceleration in the rate of improvement affecting most ages, and periodic mortality peaks—mainly affecting older people—that compound the general slowdown.

The decelerating rate of improvement in mortality from cardiovascular disease is a substantial contributor to the steady slowdown in longevity improvements. The underlying causes are unclear and could include changes in risk factors such as obesity and diabetes and the diminishing effects of prevention strategies. In the UK, improvements have also slowed for several other causes of death—for example, chronic respiratory disease. Adding to the complexities of interpreting changes in cause of death is the rising proportion of deaths attributed to dementia and Alzheimer's disease (resulting partly from diagnostic and coding changes), many of which are associated with other conditions.

Alongside this general slowdown are annual fluctuations, notably the sharp fall in life expectancy in many European countries in 2015 (greater in France, Germany, and Italy than in the UK), with a recovery in 2016. Such large, abrupt, and widespread rises in mortality followed by a recovery are unprecedented in recent years and suggest a common cause. Deaths from respiratory disease had an important role. The mortality monitoring agency EuroMOMO (www.euromomo.eu) reported excess winter deaths in 2015 across much of Europe, including the UK. Most of these were in older people and were attributed largely to flu. The pattern of excess winter deaths reported for other years is also similar across much of Europe and points to flu, pneumonia, and respiratory disease more generally in some years.

Understanding the underlying causes

Looking ahead, PHE and EuroMOMO report substantial excess winter deaths for 2017-18, largely attributable to flu, and deaths from flu and pneumonia were at or above epidemic threshold for 16 weeks in the US, one of its longest flu seasons. Like 2015, 2018 could be a poor year for some countries, including the UK.

Annual mortality changes therefore need closer scrutiny, as do secondary causes of death—for example, comorbidities associated with dementia deaths, and cardiovascular and other deaths precipitated by acute respiratory infections. The dataset for England linking hospital patient records with mortality records could provide valuable insights into comorbidities and causes of death, including by deprivation level. The effect of widening inequalities also needs closer examination. Timely analysis of such factors should become routine for PHE and the Office for National Statistics (ONS).

The UK's life expectancy is below that of many comparator countries, especially for women, for whom there has been no improvement since the slowdown started in 2011. Inequalities are widening, and the UK's healthcare expenditure and resources are below those of comparator countries. Beyond learning from international patterns, PHE and ONS need to examine urgently why life expectancy is falling further behind—including through collaboration with international agencies where appropriate.

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CHRONIC DISEASE

Is lifestyle medicine emerging as a new medical specialty?

The approach is on the rise in medical education. **Anna Sayburn** asks if it can help reduce chronic disease without putting blame on patients for their conditions

Lifestyle medicine's adherents talk enthusiastically of fixing the broken medical model and saving the NHS. Does the launch of a new diploma and its introduction to the curriculum at medical schools such as Cambridge University signal its emergence as a valid standalone specialty?

"Not just nutrition"

The Lifestyle Medicine Global Alliance, which lists 16 regional members from around the world and runs online training, defines lifestyle medicine as "an evidence based medical specialty" that uses "lifestyle therapeutic approaches" to prevent, treat, or modify non-communicable chronic disease.

These approaches include "a predominantly whole food, plant based diet, regular physical activity, adequate sleep, stress management, avoidance of risky substance use, and other non-drug modalities."

"Lifestyle medicine is not complementary or alternative—it's mainstream," says Rob Lawson, a retired GP from East Lothian now working privately, who is chair of the British Society of Lifestyle Medicine (BSLM), founded in 2016. He says people need to realise it's not just about nutrition. "You've got to get to the people who need it most. They're not going to switch fish and chips for avocado and chia seeds," he says; helping people find a purpose in life and beat isolation can tackle the "upstream causes" of disease.

Alex Maxwell, a GP in Thornton Heath, south London who is introducing lifestyle medicine into his practice, says he uses the principles in every patient interaction–but his introduction of group lifestyle consultations is the most eye catching initiative. He runs a group consulting session twice a month, where people review their biometric data and set lifestyle goals, then have sessions on food and activity. "80% of people say they prefer it to consulting on a one-to-one basis," he reports.

Helen Lawal, a GP who works in both the NHS and private sector, has developed group consultations with One Medical Group, which runs medical centres nationwide, and plans to establish NHS based lifestyle medicine clinics. "We are still seeing the same patients with the same problems, but with a shift in the way you are approaching them: less of an emphasis on prescribing and more on taking a lifestyle history and helping them to create action steps they can take immediately," she says.

"You've got to get to the people who need it most. They are not going to switch fish and chips for avocado and chia seeds"
Rob Lawson

Demand for education

In August, 40 healthcare professionals sat the first examination for the BSLM's diploma in lifestyle medicine, which is certified by the International Board of Lifestyle Medicine. Lawson says it will set a common standard of protocols and "differentiate between evidence based and otherwise."

Medical schools are getting in on the act. Anne Swift, director of public health teaching at Cambridge University's clinical school, has seen "quite a demand from students" for education about lifestyle medicine. "We're going to introduce a new curriculum through public health teaching, which will educate students on nutrition, physical activity, and sleep, and give them skills in behavioural change."

Theory and evidence will be taught in traditional lectures, while behavioural change techniques will be practised with role play. Students can train as health coaches, "so while still at medical school they have the opportunity to put those skills into practice with patients." The changes will be introduced over the next two academic years.

Lawson is also working with BSLM on a "blueprint" curriculum to make available to other medical schools, and hopes it will become an integral part of the curriculum.

A standalone specialty?

One unresolved question is whether these students are training in a new specialty, or whether lifestyle medicine is, or should be, integrated into other medical specialties.

"In the long term, it's got the ability to stand alone," says Maxwell, "but that doesn't stop the principles being applied by any speciality."

Lawal says: "I'd like to see a time when lifestyle medicine doesn't need a separate label, when it's integral to the way we deliver healthcare."

Lawson did first expect it to be part of general practice. He has discovered, however, that other "folk want to practise lifestyle medicine separately from general practice. I can see why and it reflects the pressure general practice is under." He accepts that the diploma may encourage a standalone specialty to develop. "Now we have a global exam, you can work almost anywhere in the world as a healthcare professional in lifestyle medicine."

Others consider lifestyle medicine to be the emperor's new clothes. "Advising citizens and patients about evidence based alterations to diet or exercise to prevent and treat disease has been part of the medicial curriculum for decades," says Glasgow GP Margaret McCartney.

The blame game

Some commissioning groups have refused treatments—including routine surgery—until patients tackled lifestyle problems such as obesity or smoking. McCartney says: "I am concerned that... individuals are made responsible for broader failings [in austerity and public health]."

However, Lawson is "vociferous" that lifestyle medicine does not involve blaming patients. "To apportion blame is entirely the wrong thing." He points to lower health inequalities in Nordic societies as an example of how wider societal determinants affect health.

Maxwell argues that "getting people to take responsibility" for their health is crucial, whatever their situation. "I've worked with lots of people in a deprived area and applying these principles to these guys I find far more satisfying than helping someone who knows they should be eating well to eat a bit better."

However, Nick Summerton, an east Yorkshire GP and NICE advisor, says that doctors may have difficulties understanding patients' lives. He says that as a new GP he used to lecture people about stopping smoking and couldn't understand why they didn't. "I realised their lives are not like mine and smoking was probably the one pleasure in their lives."

A key question is how to get the message over. While Lawson is sceptical of television shows' ability to deliver behavioural change, Lawal, a media doctor on television lifestyle medicine shows such as Channel 4's *Food Unwrapped*, disagrees.

"TV can be a powerful tool to bring people factual, evidence based information, or maybe expose them to other people that are going through similar experiences and be inspired by other people's stories," she says.

Saving the NHS?

The potential burden of chronic disease from lifestyle related causes is huge. With 26% of adults in the UK classed as obese, and rates of type 2 diabetes still rising rapidly worldwide, NHS chief executive Simon Stevens has warned that we need to "get serious about obesity or bankrupt the NHS."

While there's a plethora of evidence that lifestyle can affect health, the evidence that doctors can bring about clinically meaningful lifestyle changes in patients is less plentiful. If this new movement is to establish itself as a useful new branch of medicine —never mind the saviour of the NHS—it will need to prove it can truly make a difference to patients' lifestyles.

Both Lawal and Maxwell offer examples of patients who have benefited from a lifestyle medicine approach. One patient with intractable depression now plays football regularly, while another with chronic pain discovered purpose and companionship through cross stitch embroidery. Discovering a pleasurable activity was key to these patients making lifestyle changes that helped them to cope with their conditions.

Lawal says, "I really do think this is the answer. Shifting towards this approach is the way we're going to tackle public health problems and save the NHS."

FORGING A CAREER IN LIFESTYLE MEDICINE: HELEN LAWAL

Lawal exemplifies the myriad roles that lifestyle medicine offers a doctor. Her qualifications include a degree in sports and exercise science, and she has previously worked in sexual health and family planning clinics. Her roles include:

- NHS GP in Leeds
- Lead GP on lifestyle medicine with One Medical Group, developing wellbeing and lifestyle clinics and services in the private sector and NHS
- Health coach, working with private patients
- Media doctor, with appearances on Channel 4's Food Unwrapped and How to Stay Well

She says lifestyle medicine is good for doctors, as well as patients. "I have certainly experienced a significant improvement in job satisfaction by approaching my time with my patients in a lifestyle medicine way. To see patients actually make the changes and feel better —that's a good feeling, that's why we go into medicine."

"Shifting towards this approach is the way we're going to tackle public health problems and save the NHS"
Helen Lawal

However, Summerton questions the sustainability and value of lifestyle interventions versus pharmacological options such as statins and smoking cessation therapies. "The evidence [for pharmacology] is usually very good, but there is this idea that it's a bit grubby to use drugs for population health," he says.

Swift sees the potential of lifestyle medicine to push disease prevention up the agenda. "Prevention has been given lip service since the 1970s but it's never had momentum behind it," she says. The enthusiasm among medical students gives her optimism. "Students are of a generation who can envisage change and are willing to push for that."

For Lawson, who spent decades trying to implement lifestyle principles in practice before lifestyle medicine was even a recognised term, the current interest is cheering.

"The last BSLM conference [in June] was uplifting. It just shows: when you read about the state of the NHS and people put their heads in their hands, there are some people out there trying to do something about it."

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ESSAY

Gosport must be a tipping point to fix professional hierarchies in healthcare

All staff must be empowered to question the decisions of colleagues at every level and to have their concerns heard without reprisal, write **Philip Darbyshire** and **David Thompson**, if scandals like Mid Staffordshire and Morecambe Bay are to be prevented in future

The independent report into the deaths of about 600 patients at Gosport War Memorial Hospital in the 1990s is a wake-up call to every health professional. The families affected deserve more than for this report to be shelved and forgotten.

Many healthcare professionals imagined we would never read anything more appalling than the Francis report on the major failings at Mid Staffordshire NHS Trust or the Morecambe Bay report on avoidable deaths at the maternity department of Furness General Hospital.

We were wrong. The Gosport report concluded that "older patients," some of whom had been admitted for rehabilitation or respite care, had their lives "shortened," largely by the administration of "continuous opioid use" that was "not clinically indicated or justified."

Although prescribed by a doctor, the drug combinations (including diamorphine, midazolam, and hyoscine) were usually administered by nurses, who often determined exact doses and any additional doses prescribed as required (prn).

Gosport's litany of communications failure, prevarication, deliberate delay, cover-up, obfuscation, professional self interest, and buck passing will shock even the jaded practitioner who has read it all before. The focus of this essay is dysfunctional interprofessional communication and the notorious "doctor-nurse game."

BIOGRAPHY

Philip Darbyshire and David Thompson are nurses with more than 50 years of combined experience in clinical practice, education, research, and academia. They would like to see the end of the "doctor-nurse game" before they both retire.

Norms of niceness and silence are no game. They harm and kill patients

Suggestions to change the culture

- Call out all instances of rude, overbearing, bullying behaviour from any health, hospital, or university staff, be they a dean, chief nurse, consultant, or chief executive. These behaviours bolster a culture where fearful silence becomes the norm. The success of the social movements #metoo and #timesup denouncing sexual harassment shows that challenging power is possible through bottom-up resistance and change
- Create educational and clinical opportunities where doctors, nurses, other health professionals, and managers can learn and work together as equal colleagues charged with increasing patient safety. Such initiatives can work
- Include patients and families early and at every opportunity. Perhaps they will be less inclined to witness and then avert their gaze in the face of appalling professional behaviour
- Use evidence about creating safe, open, questioning healthcare organisations. We do not need more research; we need more leaders with the courage and creativity to implement what we already know
- Create funding incentives that reward radical initiatives that are proved to stimulate improvements in professional relationships

The "doctor-nurse game"

The report suggests that doctors and nurses have made little progress in improving working relationships since the US psychiatrist Leonard I Stein described the hierarchical "doctor-nurse game" some 50 years ago. Stein described a dance of deference, a "transactional neurosis," whereby medical, nursing, and societal hierarchies shaped how nurses can influence care, treatment, and clinical decisions only by subtle suggestion and by ensuring that their ideas and proposals appear to be the doctor's autonomous decision.

Such subterfuge was essential lest the nurses incur rebukes and humiliation for daring to "insult and belittle" a doctor. In the game, nurses learn to use such wiles while doctors maintain their "overdetermined preservations of omnipotence," Stein wrote.

The results of this game can be disastrous, and, as at Gosport, patients are harmed.

The hope was that this institutionalised self censorship had been relegated to history and that interprofessional communications had moved on, but too many contemporary studies and too many of our nursing colleagues recount bitter experiences of vitriolic condemnation from doctors to believe this.

At Gosport, nurses at several levels were systematically dissuaded from—and were as a group unable or unwilling to—challenge or question the prescribing practices of a doctor.

Lethal silence

But norms of niceness and silence are no game. They harm and kill patients: people are dying unnecessarily because some health professionals "don't want to make a fuss" or worry they might "upset" a "very caring"

At Gosport, nurses were systematically dissuaded from—and were as a group unable or unwilling to—challenge or question the prescribing practices of a doctor

doctor, as the Gosport report puts it, while others enjoy their lofty status of being beyond question.

This insidious "status hierarchy" blights nursing and medicine in all settings but especially in hospitals. The game seems to affect relationships between doctors and nurses far more than those with allied health staff or others. As Stein noted in connection with the broadening of multidisciplinary teams, "The sociologist, for example, is not willing to play that kind of game."

Its continuation cannot be dismissed as the fault of a few bad apples when it is the orchards that are rotten. These hierarchies and game based relationships are not outlier aberrations. The fear of reprisal is the norm for many. A student nurse or new graduate registered nurse can be just as wary of questioning a senior as a resident would be intimidated by challenging a consultant. As one US nurse remarked about practice in a neonatal intensive care unit there, "questions can only go down [the hierarchy], you are very careful about questions going up the chain of command." Other studies have shown that many health professionals ignore dangerous practice rather than intervene or question another professional.

Dancing around care needs

An airline pilot whose 37 year old wife died after relatively minor nasal surgery, wrote of nurses "dancing around" her care needs, knowing full well that she was in danger but unable to state this explicitly to her doctors: "The nurses were clearly aware that things were going wrong but seemed unable to say anything…
It's often 'simply not your place' to speak up." These perverse charades and their calamitous consequences are what pass for communication among too many health professionals.

Healthcare is often compared with the airline industry, but pilots and aircrew have much more at risk than health professionals. If aviation has serious flaws impeding safety, planes may crash and crew members as well as passengers will die, but no threat hangs over the professionals implicated in the past 50 years of

NEIL WEBB

healthcare scandals. Many of those with the greatest culpability for poor care face no loss of status, livelihood, freedom, or life. They merely move on to their next health service, charity, or quango position.

Before the airline industry's worst ever disaster in1977, when two jumbo jets collided at a Tenerife airport, the airline industry played its own pilot-aircrew game; cabin relationships were based on the accepted wisdom that "the captain is God, and what he says goes." Nearly 600 people died; it fundamentally changed an entire industry. A similar number died prematurely at Gosport, yet many professionals worry this will just be another momentary blip on the business-as-usual radar of health worker relationships.

Lethal subservience and deference is endemic in health systems. Professionals rightly fear retribution, disapproval, career limiting consequences, and worse if they dare to question or challenge colleagues in any discipline. Surely, enough is enough. For over 50 years patients and families have endured preventable errors, operations at the wrong site, and unnecessary deaths because some professionals and systems are dysfunctionally dangerous yet seemingly untouchable. This is our problem as health professionals. No politician or chief executive can fix this for us.

Professional imperative

We need a better approach to interpersonal relationships. Every registered health professional, from new student to modern matron and consultant, must understand it is essential that their practices and decisions are discussed, questioned, and challenged by colleagues.

There should be no place in modern healthcare for the bully, prima donna, micromanager, egomaniac, or narcissist

The days of unilateral decision making and unfettered clinical freedom are over. The days of "Don't you know who I am?" are over. The doctor-nurse game can be ended.

Leader inclusiveness—"words and deeds exhibited by leaders that invite and appreciate others' contributions"—may help cross-disciplinary teams overcome the inhibiting effects of status differences, encouraging members to collaborate in process improvement.

Good relationships, hallmarked by an overwhelming focus on patient safety and wellbeing over professional niceties, historical status, and comedies of manners should be a legacy of reports like Gosport if we are genuinely to claim that lessons have been learnt. There should be no place in modern healthcare for the bully, prima donna, micromanager, egomaniac, or narcissist. There should be no "job for life" for professionals such as feared senior staff who one study found would "lash out," "have a meltdown," "explode," "blast off," and "unravel," ensuring that colleagues kept silent because speaking up was considered to be "detrimental to safety."

If any health professional feels unable to work in a collegial, respectful, and open manner, it is time for them to find another career.

Changing complex and resistant hierarchies and relationships is not easy: Stein observed that "the forces militating against change are powerful." No magic bullet will prevent the next scandal. As doctors and nurses, however, we can and must minimise or prevent the lethal doctor-nurse game from being played for another 50 years.

Gosport must become a watershed in healthcare, where health professionals finally say enough. No more patients should be harmed because health professionals stayed silent or were silenced[1] or encountered institutional uninterest when their warnings were not heard.

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