this week

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PETER MARSHALL/ALAMY

Opponents—including those aligned with Care Not Killing—and supporters of assisted dying gather outside the Houses of Parliament last September as MPs debated the issue

Allegations mar assisted dying poll

The row over the Royal College of Physicians' assisted dying poll has reached a new level of acrimony, with claims that opposition is been orchestrated by conservative Christian groups.

A report from Dignity in Dying, which campaigns for assisted dying to be legalised, says that pro-life, faith based organisations are attempting to deny doctors a say.

The RCP is polling its 35 000 members and fellows and has ruled it will adopt a "neutral" position unless at least 60% vote in favour of or against a law change, effectively ending opposition to legalisation. The college was due to announce the results on Thursday, after *The BMJ* went to press.

But the RCP is facing a legal challenge to the decision to seek a supra-majority. A group of doctors has set up a crowdfunding campaign to seek a judicial review of the poll. The college is accused of organising a sham poll designed to change its historical opposition to assisted dying after being influenced by lobbyists for legalisation.

Now the pro-assisted dying camp has hit back with a 10 page report "exposing the anti-choice networks trying to deny doctors a voice." The report says that advertisements that ran in *The BMJ* in February on behalf of Our Duty of Care, formed to oppose the poll, were paid for by another organisation, Care Not Killing, which has a membership that includes UK hospices but is largely made up of faith groups. The link was not declared.

David Randall, a doctor in the group, said, "Our Duty of Care was a short term campaign launched by a group of RCP members and fellows, in response to the poll. We were keen to provide a balanced response by practising clinicians to the large volume of advertising that was supporting assisted suicide. Care Not Killing provided logistical and financial support that enabled us to be up and running in a matter of days."

Dignity in Dying's report also highlights the role of an organisation called Alliance Defending Freedom (ADF) International, which describes itself as "a faith-based legal advocacy organization." It has fought assisted suicide and euthanasia laws in Europe and has been active in opposing abortion and same sex marriage.

"In order to bring our assisted dying laws in line with other more progressive states around the world, we need to overcome the influence, power and funding of the small, vocal minority who stand against change," the report says.

Bryan Christie, Edinburgh

Cite this as: *BMJ* 2019;364:l1278

LATEST ONLINE

- Clinical oncology trainee numbers must double to fill workforce shortfall, says college
- Renal denervation achieves sustained blood pressure reduction, finds trial
- Higher potency cannabis linked to higher rates of psychosis

SEVEN DAYS IN

Doctors' access to rest facilities to be included in GMC training surveys

CHARLES BIRCHMORE

Doctors will be asked for the first time about their access to rest facilities (left) and study spaces in the GMC's annual training surveys.

The regulator has also added questions about transport home after shifts, wi-fi access, and the quality of online learning resources to assess the impact these have on training. Colin Melville, the GMC's director of education and standards, said, "We know heavy workloads and rota gaps take a toll on training, but these extra questions will help us understand what other factors have an impact."

The questions will be put to around 54 000 doctors in training and 46 000 senior doctors who act as trainers. Melville called on as many doctors as possible to complete this year's surveys before the 1 May deadline. "Each survey's results help medical education bodies and employers to make sure trainees are getting high quality training, and that trainers are properly supported," he said.

In 2018 questions relating to burnout were added to the surveys. Responses showed that 24% of trainees and 21% trainers felt burnt out to a high degree. *The BMJ* is campaigning for doctors to be able to take the breaks that they need for their wellbeing and for patient safety.

Harriet Pike, Cambridge Cite this as: *BMJ* 2019;364:l1261 #giveusabreak bmj.com/wellbeing

Vaccination

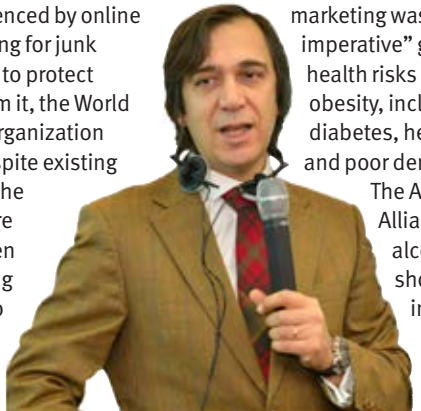
Italy suspends unvaccinated children from school

Parents of Italian children aged 6 or older who are not vaccinated as required will be suspended from school or kindergarten and fined €500 (£430) under a new policy. Required vaccines include MMR, tetanus, chickenpox, and polio. The policy is a climbdown by Italy's government, whose coalition parties have frequently been vaccine sceptical. Last year the new government initially said that it would eliminate the "coercive" law requiring vaccinations at school, but it was forced to relent in September as measles cases surged.

Junk food advertising

WHO calls for more action to protect children

Governments must do more to understand how children are influenced by online advertising for junk food and to protect them from it, the World Health Organization said. Despite existing policies the "exposure of children and young people to the online marketing of unhealthy food products, tobacco, and alcohol is common," said João Breda (below), head of the WHO European Office for the Prevention and Control of Non-Communicable Diseases. Regulatory frameworks "do not fully protect children and young people, and they may need improvements," he said at a report launch.



Government proposes 9 pm watershed

The UK government announced a public consultation on proposals to restrict advertising of foods that are high in fat, sugar, and salt to children. These include a 9 pm watershed for TV advertising of some foods and similar measures online. Parveen Kumar, BMA board of science chair, said that restricting children's exposure to junk food marketing was "absolutely imperative" given the serious health risks associated with obesity, including type 2 diabetes, heart disease, and poor dental health. The Alcohol Health Alliance said that alcohol advertising should be included in the ban.

Child health

New Labour policies reduced infant mortality

New Labour's strategy under Tony Blair (above) on health inequalities in 1999-2010 narrowed the gap in infant mortality between the most deprived local authorities and the rest of England at a rate of 12 infant deaths per 100 000 births each year, said a study in the *Journal of Epidemiology & Community Health*. But from 2011 to 2017 the gap began to rise again at a rate of four deaths per 100 000 births a year, possibly as a result of the Conservative government's austerity policies.

CCGs breach guidelines by taking milk formula money

Almost a third of clinical commissioning groups in England have breached World Health Organization guidelines by accepting payments, advertising, or sponsorship from infant formula milk manufacturers in the past five years, an investigation by Channel 4's *Dispatches* found. Some 59 of 195 CCGs recorded a breach of WHO's code of practice, which is designed to protect breastfeeding and to regulate the marketing of breast milk substitutes. *The BMJ* and its sister journals announced this week that they would no longer carry advertisements for breast milk substitutes (see page 475).

Welfare support

Ministers urged to scrap "misleading" letters to GPs

Campaigners urged the Department for Work and Pensions to stop sending GPs "misleading" letters stating that their patients no longer need a "fit note" if they have been found to be fit for work. The Zacchaeus 2000 Trust, a charity working against poverty in London, said that the letters were leaving severely ill and disabled claimants unable to obtain the Employment and Support Allowance that they were entitled to, pending appeal. The practice damaged the doctor-patient relationship and patients' health and left some in serious financial difficulties, said the charity as it launched its #scraptheletters campaign.

MEDICINE

Research news

Cholesterol or eggs may raise risk of CVD and death

Higher consumption of dietary cholesterol or eggs is associated with an increased risk of new onset cardiovascular disease and mortality, a US study showed. The Northwestern University in Chicago study pooled individual participant data from six prospective US cohorts, using data collected from 29 615 adults followed up for a median of 17.5 years from 1985 to 2016. Results reported in *JAMA* showed that each additional 300 mg of dietary cholesterol consumed each day was associated with a 17% rise in incident CVD and an 18% increase in all cause mortality.

Higher egg consumption is linked to an increase in all cause mortality

Even low physical activity cuts risk of death

Walking or gardening for 10 minutes to an hour each week was associated with a lower risk of death from cardiovascular disease, cancer, or any cause, found a large observational study in the *British Journal of Sports Medicine*. Higher amounts of activities or more vigorous ones such as running, cycling, or competitive sports were associated with additional health benefits that were not outweighed by the risks of participating, the authors said.

Industry litigation

Medtronic subsidiary pays $17m over kickback claims

A subsidiary of the device maker Medtronic will pay $17.5m (£13.3m) to resolve allegations from the US Department of Justice that it offered doctors kickbacks in the form of free or discounted services to encourage them to buy its devices and to bill the cost to Medicare or Medicaid. The doctors received no money from the company, called Covidien, but the support it gave them in developing their practices and finding new patients nevertheless counted as an illegal inducement to bill the government for services involving the company's products, US attorneys warned.

California jury awards $29m to woman in talc claim

Johnson & Johnson must pay $29m (£22m) to a Californian woman who had mesothelioma diagnosed after using its talcum based products for years—a further blow to a company still facing nearly 13 000 US lawsuits. Terry Leavitt told the court that she had used Johnson's Baby Powder and Shower to Shower throughout the 1960s and 70s. Her mesothelioma was diagnosed in 2017. The jury in Oakland's superior court found that the products were defective and that consumers had not been warned of the risks.

Medical journals

BMJ tops ranking for website quality

The BMJ is the highest ranking general medical journal in terms of domain authority, which rates websites on the number and quality of other websites they link to. *The BMJ* scored 90 out of 100, compared with scores of 89 for *JAMA*, 88 for the *New England Journal of Medicine*, and 85 for the *Lancet*.

Cite this as: *BMJ* 2019;364:l1264

ONCOLOGY

In 2018 the UK had 863 whole time equivalent clinical oncologists, a shortfall of 184 to meet demand. This compares with shortfalls of 144 in 2017 and 78 in 2016 *[Royal College of Radiologists]*

SIXTY SECONDS ON . . . DEMOCRACY

THE BREXIT DEBATE IS MAKING ME ILL

On the contrary, it's democracy in action, and that's good for your health.

OH YES? SAYS WHO?

The authors of a paper in the *Lancet* that looks at countries that have embraced democracy since 1980 and concludes that their health outcomes are significantly better than they would otherwise have been. Over 20 years, democratic experience cut heart mortality, for example, by 9.64% (95% confidence interval 6.38% to 12.9%).

IT WOULD BE NICE TO BELIEVE IT

You mean you don't? Shame. Granted, the statistical techniques are pretty opaque, and it's an observational study that can't determine cause and effect. But it's plausible, if one accepts that people with meaningful votes force governments to pay more attention to health.

SO WHAT DID THEY DO?

They took life expectancy figures (recalculated to exclude the HIV pandemic) and compared them with information on the type of regime in each country. They also looked at gross domestic product per capita, domestic health spending, and foreign aid directed at health. They processed the data using four statistical techniques.

WHAT DID IT SHOW?

That life expectancy at age 15 was 3% better after 10 years in countries that had acquired democracy. Thomas Bollyky, of the US Council on Foreign Relations and lead author of the paper, said, "This is good news at a time when the news around democracy has been fairly depressing."

WHY DEPRESSING?

The authors say, "With the political turmoil in the US and Europe, the case for democracy has never seemed dimmer." Presumably that's code for saying that the authors like democracy best when they approve of its outcomes.

WHY DID THEY EXCLUDE HIV?

This is not adequately explained and may have skewed the findings.

WHAT ARE THE IMPLICATIONS?

International health assistance might be more effective if it focused on promoting democracy as well as on technical matters.

Nigel Hawkes, London

Cite this as: *BMJ* 2019;364:l1225

Third of lower GI cancer patients face delays

Sara Hiom, of Cancer Research UK, said targets could be met only if trusts recruited more staff

A third of patients in England with lower gastrointestinal cancers face delayed treatment, as figures show that NHS performance against treatment time targets has fallen to an all time low.

Data for January show that 66.1% of people with lower gastrointestinal cancers received treatment within two months of being urgently referred by their GP, against the 85% target set for the NHS in England. It is the worst performance for any of the five main cancer types with a measured target.

The target was also missed for urological (68.8% of patients treated within two months) and lung cancers (69%) but was met for breast and skin cancers (88.6% and 93.2%, respectively).

The latest figures also show worsening waits for emergency and routine care when compared with the same period last year, just days after NHS England announced plans to overhaul waiting time targets for hospital treatment.

The plans include a new target to provide a definitive diagnosis to all people with suspected cancer within 28 days of urgent referral by their GP or a screening service. The government expects the NHS to ensure that 85% of patients who are given a cancer diagnosis undergo their "first definitive treatment" within 62 days of referral. But the data on waiting times show that in January only three quarters (76.2%) of patients received treatment within that time frame, down from 81% in December.

The NHS in England missed all three of its main cancer waiting time targets in January. The others were for people with suspected cancer being seen by a specialist within two weeks (91.7%, down from 93.7% in December, against a target of 93%) and for patients with a new primary cancer receiving treatment within 31 days of diagnosis (95.4%, down from 97.1%, against a target of 96%).

Continued strain

Sara Hiom, director of early diagnosis at Cancer Research UK, said, "These figures show an NHS under continued strain, with many patients still waiting too long to get a diagnosis and start treatment. For anyone going through tests and treatment for cancer it's an incredibly anxious time, and delays can make that worse."

Hiom called for "a clear workforce strategy and associated funding" to resolve staff shortages. "There simply aren't enough staff to deliver the number of tests required," she said.

John Appleby, chief economist

TARGETS MISSED FOR URGENT AND ROUTINE CARE

Figures for February 2019 show that 84.2% of all patients attending A&E in England were dealt with within four hours, below the 95% target and the lowest figure since the target was introduced in 2004

More than four million patients are on waiting lists for surgery and other routine care, with more than 550 000 waiting more than 18 weeks. Some 86.7% were seen within 18 weeks, short of the 92% target, which has not been met since February 2016

Judge rules against GP who missed cauda equina syndrome

A GP breached his duty to a 35 year old out-of-hours patient in failing to note red flag warning signs for cauda equina syndrome and to refer her urgently to hospital, a High Court judge has ruled.

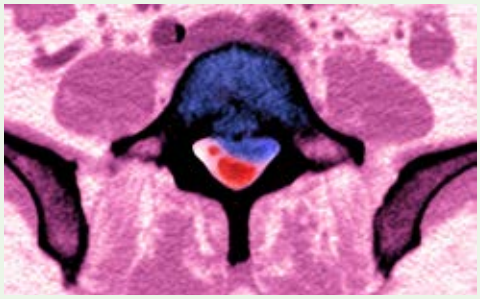
Red flag symptoms

Andrew Stead could not remember his consultation with Kerry Shaw in 2013 but had written "no red flags" in his notes. But Mrs Justice Yip accepted the evidence of Shaw and her husband that she did have red flag symptoms.

Cauda equina syndrome is a rare and severe narrowing of the spinal canal usually caused by a prolapsed intervertebral disc. It causes problems such as numbness and weakness in the legs, not being able to urinate or control the bladder, and loss of bowel control, and it requires emergency surgery to prevent permanent nerve damage and disability.

Yip accepted that Shaw had used a wheelchair during the consultation at the Grimsby area primary care emergency centre, an out-of-hours unit next door to a hospital emergency department, although the wheelchair was not noted in his records. The judge also accepted that Shaw had been unable to urinate the morning before she saw Stead and had wet herself on returning to bed.

Two days after seeing Stead, an on-call registrar advised she be sent to the emergency department immediately



SPL/SCIENCE PHOTO LIBRARY

Shaw, a teaching assistant, had been squatting on the floor when she was kicked by a child with special needs. She fell forward, twisted as she got up, and immediately felt back pain. The next day she saw her GP and was given painkillers. The following day, a Saturday, she phoned the out-of-hours service, where she saw Stead. He recorded a diagnosis of sciatica and gave her different painkillers.

On Monday she phoned the out-of-hours service again. A nurse recorded that she was "struggling to mobilise as legs feel cold and like jelly."

Emergency surgery

That afternoon she returned to the out-of-hours unit. A second doctor consulted the on-call registrar, who advised she be sent to the emergency department immediately. Incomplete cauda equina syndrome was diagnosed after an MRI. She was transferred to Hull Royal Infirmary for surgery.

The trial was to decide only on breach of duty, not whether it caused injury.

Clare Dyer, *The BMJ*

Cite this as: *BMJ* 2019;364:l1231

MARK THOMAS/SPL

at the Nuffield Trust, described the figures as "a sharp and concerning spike" compared with previous months. "These measures show the sheer weight of pressure that NHS staff face on a daily basis and will understandably worry patients at a very difficult time," he said.

NHS England said thousands more patients were being treated within the two month target, a growth of 4.1% since 2018. And almost 20 000 more people with suspected cancer saw a consultant within two weeks of referral in January than last year.

Scotland, Wales, and Northern Ireland are also experiencing rising demand and are struggling to meet waiting time targets. All expect 95% of patients with cancer to have started treatment within 62 days of their urgent referral (a higher target than England's 85%). Scotland last achieved its target in 2012. In Wales, in the last quarter of 2018, 86.5% of new cancer patients started treatment within 62 days of referral, down 1.9 percentage points from the same period in 2017. In Northern Ireland figures show that last September just 61.8% of patients started treatment within 62 days of an urgent referral.

Harriet Pike, Cambridge

Cite this as: *BMJ* 2019;364:l1252

Tax social media firms to "protect children from online Wild West"

A 0.5% levy should be made on the profits of social media companies to fund research, educational tools, and clearer guidance to protect children's health, MPs have concluded.

The government should also commission a review to look at whether the "addictive" nature of social media is sufficient for official disease classification, advises the all party parliamentary group on social media and young people's mental health and wellbeing.

Chris Elmore (above), Labour MP and the group's chair, said, "For too long social media companies have been allowed to operate in an online Wild West. It is in this lawless landscape that our children work and play online. This cannot continue." The report, published last Monday, details the findings of the group's national inquiry, which ended in January after nine months. Other recommendations include a statutory duty of care and code of conduct for social media companies with registered UK users aged up to 24, regulated by Ofcom.

Shirley Cramer, chief executive of the Royal Society for Public Health, said the inquiry clearly highlighted the need for regulation to provide "much needed health and safety protection" to children. She added, "It is vital further research is prioritised to improve our understanding of the health harms, as well as benefits, from social media. This should be supported by industry itself."

Gareth Iacobucci, *The BMJ*

Cite this as: *BMJ* 2019;364:l1263

Half of English councils have lost specialist stop smoking services

Almost half of England's local councils no longer have a specialist stop smoking service for all smokers in their area as a result of government cuts to public health budgets, a new analysis has shown.

A survey by the charities Action on Smoking and Health (ASH) and Cancer Research UK found that 85 of 151 local authorities (56%) provided a universal specialist service in 2018-19, down from 61% the previous year. Last August a *BMJ* investigation found that half of local authorities in England had cut their stop smoking budgets in 2018-19, a continuing trend driven by government reductions to public health budgets.

The survey, now in its fifth year, reported that investment in cessation services had fallen by £41m (30%) across England between 2014-15 and 2017-18.

Affluence gap persists

While the prevalence of smoking among adults continues to fall, rates have levelled out among some groups, such as pregnant women, the report said. It also found that the gap in smoking rates between affluent and deprived people remains unchanged, and that the highest quit rates were in local authorities that still had specialist stop smoking services.

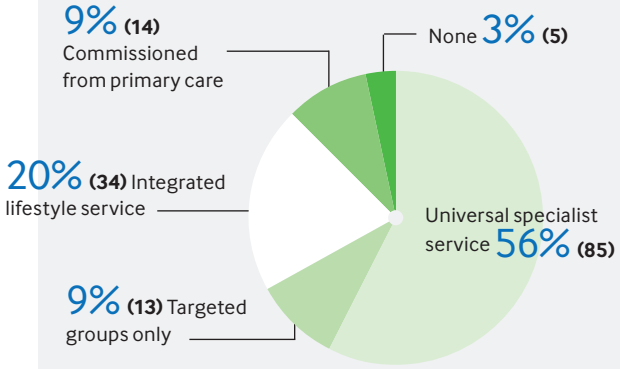
As well as calling for the government to reverse the cuts to the public health grant, the report urged local authorities to ensure smoking services were evidence based and helped the most people to quit.

Hazel Cheeseman, ASH's director of policy, said, "Local authorities are having to make the best of a butchered public health budget, and many are managing to do just that. But councils need to avoid a race to the bottom."

Peter English, chair of the BMA's public health medicine committee, said, "Cuts to smoking and other healthcare prevention services are not cost effective. They have a detrimental impact on population health which increases future NHS demand."

Gareth Iacobucci, *The BMJ* Cite this as: *BMJ* 2019;364:l1216

STOP SMOKING SERVICES FOR 151 ENGLISH LOCAL COUNCILS



FIVE MINUTES WITH . . .

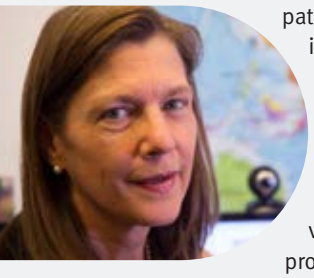
Heidi Larson

Director of the Vaccine Confidence Project discusses the rise in vaccine hesitancy and how to counter it

"The job gets harder every day—with more fascinating insights into human behaviour. We made a world map, tracking where sentiment about vaccines causing autism is in the media. It's everywhere. We may have done a decent job of tackling it here, but it's gone global.

"The Oregon case [see news story, right] shows how hardened some views have become. It's an extreme example but they're not alone.

"In the UK, if you compare vaccination acceptance just a few years after Wakefield's publication [in 1998] we're doing better. But if you compare now to before publication, we're doing worse. I think overall vaccine rates are declining; there's much more questioning by the public and by health professionals as well.



"Professionals are faced with patients challenging them with internet 'evidence.' I think sometimes they hesitate because they don't know how to deal with this tsunami of questions. With the growing number of vaccines, even some health professionals are hesitating.

PROFESSIONALS HESITATE BECAUSE THEY DON'T KNOW HOW TO DEAL WITH THE TSUNAMI OF QUESTIONS

"Social media platforms, without intention, have amplified concerns. I think it's important that Facebook is responding to the call, but it's inappropriate for us to be asking it to distinguish what is good information on vaccines from what's bad. That's the job of public health institutions, and we need to take responsibility for some of the content. We should be thinking about a collaborative approach, combining Facebook's areas of expertise, such as fixing algorithms, with those of the public health community, who can advise on credible content.

"I salute WHO for finally acknowledging that vaccine hesitancy is a global health threat and has named it as one of the top 10 global health threats alongside climate change, Ebola, antimicrobial resistance, and air pollution."

Heidi Larson is professor of anthropology at the London School of Hygiene and Tropical Medicine

Joanne Silberner, *The BMJ*

Cite this as: *BMJ* 2019;364:l1259

Parents refuse vaccine for son who survived tetanus

The parents of a 6 year old boy who survived tetanus after 57 days in an Oregon paediatric acute care unit in 2017 have refused the recommended second dose of tetanus vaccine.

The boy's hospital care in 2017 cost $811 929 (£620 000)—plus the cost of emergency air transport, rehabilitation, and follow-up care, according to an account in *Morbidity and Mortality Weekly Report*.

This was the first case of tetanus in Oregon in 30 years. A reported 7.5% of the state's schoolchildren do not receive vaccines, with parents choosing "non-medical exemptions"—that is, personal reasons.

Booster shot

Recommended protection against tetanus is five doses of the DTaP (diphtheria, tetanus, and acellular pertussis) vaccine given to children at 2, 4, 6, and 15-18 months and at 4-6 years. A booster shot is recommended every 10 years throughout life.

Carl Eriksson, a paediatric critical care specialist at Doernbecher Children's Hospital in Portland and coauthor of the report, told *The BMJ* that he had never previously seen a case of tetanus. "Most physicians in the US have never seen a case. It was recognised in the emergency department. He presented with classic symptoms and history," he said.

The boy, who had had not received the tetanus vaccine, cut his forehead while playing outdoors on a farm. The cut was cleaned and sutured at home. "Six days later, he had episodes of crying, jaw clenching, and involuntary upper extremity muscle spasms, followed by arching of the neck and back [opisthotonos] and generalized spasticity.

"Later that day, at the onset of breathing difficulty, the parents contacted emergency services," the report says. He was airlifted to the Doernbecher hospital where he was sedated, intubated, and put on a respirator. He received 3000 units of tetanus immune globulin, DTaP vaccine, and intravenous metronidazole. He was admitted to the paediatric intensive care unit and, because stimulation increased his spasms, he had ear plugs and was cared for in a darkened room.

But the boy's spasms worsened. He developed hypertension and tachycardia, and his temperature ranged from 36.1°C to 40.5°C. He was given multiple continuous medication infusions to control his pain and blood pressure and underwent neuromuscular blockade to manage his spasms. He had a tracheostomy for prolonged ventilator support.

After 44 days, the boy came off the ventilator and could take sips of liquid. He was transferred to an intermediate care unit, and a few days later he was able to walk 6 metres with assistance. His tracheostomy was removed, and three days later he was moved to a rehabilitation centre where he spent 17 days. A month later he was able to return to normal activities, including running and cycling.

Despite the medical team's efforts at education the boy's parents refused the recommended further DTaP vaccination. Privacy issues prevented Eriksson explaining why. Surviving one episode of tetanus does not protect against a second infection.

"I've seen close to 100 patients who needed intensive care because of a disease that is preventable by vaccine. I've never had to give intensive care because of complications from a vaccine," Eriksson told *The BMJ*.

Janice Hopkins Tanne, New York

Cite this as: *BMJ* 2019;364:l1172

THE BOY'S CARE cost $811 929, not including the cost of air transport and rehabilitation

NEWS ANALYSIS

"GPs aren't Luddites, they want safe care"

Many doctors support digital tools in primary care but say they need to be based on evidence and shouldn't disadvantage patients with complex health needs. **Gareth Iacobucci** reports

Digital healthcare is "not about replacing GPs" but about "leveraging the very best technologies such as artificial intelligence and trying to remove the unnecessary burden we face," London's GPs were told last week.

Mobasher Butt, a GP and medical director of Babylon Health, a key player in digital healthcare, said that such services were also "a tool for patient choice." It's an argument that GPs have been hearing for some time now.

NHS England recently launched an app allowing patients to book GP appointments, and the BMA and NHS England have agreed a contract that requires all general practices to make at least 25% of appointments available for online booking by July and to offer online consultations by April 2020.

Inverse care law

Butt made his comments during a panel debate on how digital health should develop at the conference of the Londonwide Local Medical Committees, the umbrella group that represents the capital's more than 7000 GPs.

The delegates generally agreed that technology presented big opportunities but had questions about how it could be deployed. The debate heard concerns about the safety and regulation of AI symptom checkers and chatbots, which are used by some app based services such as Babylon's GP at Hand, Ada Health, and Your MD.

Jackie Applebee, chair of Tower Hamlets LMC, has been a vocal critic of the effects of GP at Hand. She told the conference she was not anti-technology but was concerned that Babylon's service, which allows patients to register only through its app, favoured younger, healthier, and "technologically savvy" patients and thus risked creating "a new version of Julian Tudor Hart's inverse care law—providing access for those who need it least at the expense of those who need it the most." She also argued that complex care for vulnerable people and those with comorbidities was "best delivered face to face."

Applebee condemned what she described as a "cavalier attitude" to testing technology. "Evidence is absolutely vital, and I don't think it's good enough to say there isn't time, because I think there are huge unintended consequences," she said. "Sometimes we do just have to wait. You can't get a drug or a surgical procedure onto the market without proper evidence. We are not Luddites . . . but [the technology] has to be safe," she said.

Independent evidence

Ben Goldacre, debate chairman and head of the government's Healthtech Advisory Board, agreed that independent evidence was crucial. But while noting the shortcomings in Babylon's preprint paper that aimed to show its chatbot matched GPs' diagnoses, he said it was disappointing that no academic group had evaluated Babylon's symptom checker.

"I'm not so sure I can blame Babylon for the fact that the academic community hasn't raised its game and set out to try to evaluate these tools for themselves," he said.

Butt said Babylon would welcome an independent study, but traditional research methods such as randomised controlled trials "might not be the appropriate methodology," because of technology's fast changing nature.

Gareth Iacobucci, *The BMJ*

Cite this as: *BMJ* 2019;364:l1258

HOW CAN GPs SET THE AGENDA?

Murray Ellender, a GP in south London and co-founder of eConsult, an online triage tool, believes it's important for GPs to be involved in developing technologies to help shape the way services evolve.

He said one of the most important things for general practices to understand was that digital tools should not be about creating extra demand. "Practices have got to think of it as an alternative. You need to replace some telephone and face to face consultations with online consultations. As a practice, you've got to think through how you're going to use the tools."

Ellender said that around a 10th of practices in the UK had signed up to use eConsult. "We have case studies of practices where they've implemented this and it's freed up time," he said. "If you can show where it's worked, that's quite reassuring."

Becks Fisher, an Oxford GP and policy fellow at the Health Foundation, said the most important questions for practices to ask were, "What is the problem that we need to solve, and are we clear that we're trying to do it in a way that doesn't generate supply induced demand, which is a risk?"

The academic community hasn't raised its game and set out to try to evaluate these tools for themselves Ben Goldacre, Healthtech Advisory Board

JUAN BARRETO/AFP/GETTYIMAGES

THE BIG PICTURE

Crisis in Venezuela

The plight of Venezuelans continues to worsen as a massive national power outage forced many people to collect water themselves, including from a broken pipe flowing into a sewage canal at the Guaire river in Caracas this week. The major blackout, which lasted for more than a week, stopped water plants from operating. Families posted images on social media of black sludge running from their taps.

Hospitals, already severely affected by a shortage of drugs, equipment, and staff, were also left without electricity and clean running water. The collapse of the country's healthcare system threatens the rest of the continent, according to a report published last month in *Lancet Infectious Diseases*.

The authors warn that South America's public health gains of the past 18 years could be undone if Venezuela does not accept help to control the spreading outbreaks of malaria, Zika, dengue, and other illnesses that are afflicting its people.

The latest power outage has intensified the standoff between the incumbent president, Nicolás Maduro, who is refusing to allow US led aid into the country, and Juan Guaidó, the self declared interim president trying to oust him.

Alison Shepherd, *The BMJ*

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WORKFORCE

How can the NHS offer fulfilling, lifelong careers?

With morale and retention among UK doctors declining, *The BMJ* hosted a discussion at the Nuffield Trust health policy summit, asking what extra support can be offered. **Abi Rimmer** reports

Ronny Cheung, above right, or Eveling London Children's Hospital

"Enabling people to pursue their other interests is one key thing," said Rakhee Shah, paediatric registrar and research associate at the Association for Young People's Health, kicking off discussions. She highlighted the importance of giving clinicians more control over their working lives.

Ronny Cheung, consultant paediatrician at Evelina London Children's Hospital, took this further, saying that it was also important to give doctors control over their everyday workload. He said that his trust, Guy's and St Thomas' NHS Foundation Trust, had been "trying to make time and space for teams to come together."

"It's about regaining control," he said, "and investing in people to allow them to do that." This not only made staff feel more valued but also helped to remind them what they enjoyed about their work. "It has a multiplying effect," he said.

It's about regaining control and investing in people to allow them to do that. It has a multiplying effect
Ronny Cheung, consultant paediatrician, Evelina Children's Hospital

ALL IMAGES EMILE HOLBA

We can be very dismissive of exceptional individuals when they need to be reassured
James Morrow, Cambridge GP

Claire Lemer, a consultant colleague of Cheung, highlighted the importance of food for staff. She described a successful initiative at her hospital that encouraged the executive team to provide food for clinical and administrative staff.

She said, "It's just extraordinary to see how staff respond to someone taking the trouble to do something really small that says, 'Actually, you matter.' If you go home from a day like that feeling wanted and rewarded, you are much more likely to stay committed to that organisation as well as the wider system."

A cup of tea

Candace Imison, Nuffield Trust's director of workforce strategy, said the provision of food and drink had come up during the work she had done on night working. Doctors had told her, "Just giving us a cup of tea at night would be nice." She said, "Taking the tea lady away made a big difference."

She added that effective teamwork was crucial for clinical staff. When she was on Health Education England's primary care workforce commission, which looked at how general practice could adapt to meet future needs, Imison had visited "practices that had made a reality of the multidisciplinary team, and who felt that they were working as a team: doctors in those practices talked about how different that had made their working lives."

James Morrow, a Cambridge based GP, said that clinicians need flexibility throughout their careers. It is "absolutely critical," he said, to "identify those who have interests and talents and abilities and to provide mentoring and support for them."

He added, "In healthcare we can sometimes be very dismissive of exceptional individuals when they need to be reassured, so that they feel valued and so that they are contributing."

Reduced support

The demise of the firm structure in hospitals has reduced support for clinicians, said Morrow. "We have lost a lot of that historic mentoring, apprenticeship role, which in some ways is good because we [now] provide equality of opportunity, but all of us need mentors, and all of us need support . . . there is a real need for replacing that sort of nurturing environment," he said.

Lemer said senior clinical leaders should look for signs that their staff are not coping. "Part of being a senior medical manager is watching over people, making sure that's noticed, rather than waiting for individuals to have to put their hand up, which can be a bit terrifying," she said.

Martin Marshall, professor of healthcare improvement at University College London's department of primary care and population health, said many senior doctors no longer mentored juniors as part of their professional responsibility. "That's probably because of workload: so many doctors are in survival

The pressure and intensity of work is so extreme that it's not sustainable for a whole career
Claire Lemer, consultant paediatrician, Evelina Children's Hospital

Taking the tea lady away made a big difference
Candace Imison, director of workforce strategy, Nuffield Trust

mode and can't think beyond their own needs," he said.

"But most doctors who are thriving now," he noted, "are doing so because they've had patrons, mentors, and supporters in the past who've identified them and supported them through difficult times."

The panel also discussed how the intensity of clinical work affects clinicians' ability to maintain a long term career in the NHS. Lemer said that, in some specialties, "the pressure and intensity of work is so extreme that it's not sustainable for a whole career."

Intensity of work

Doctors in general practice are also struggling with workload intensity, Morrow added. "One of the most common reasons for people leaving the workforce is that they simply find, even if they're working part time, that the intensity of the work is unsustainable: it's at a personal cost which is too great," he said. "We've focused a lot on resilience—the ability to cope in the face of adversity—rather than creating a system and structure that actually doesn't require that level of resilience.

"We should be engineering something that reflects a sustainable, aspirational, rewarding long term vocation rather than simply service delivery units."

The discussion then moved on to the need for doctors to take breaks, both short and long term. Cheung commented that a stigma was still attached to doctors taking time off from their careers.

"People assume that you're burnt out and that you can't cope with what you're doing. There is a bit of machismo and heroism about us carrying on doing what we're doing, and we have to end that," he said.

The more doctors take breaks, the more normal it would become "and the more it will be acceptable, and we'll get rid of that culture," he added.

Inflexible training pathways

Cheung also warned that the rigidity of medical training pathways was denying doctors the flexibility they needed, as they were forced to choose a specialty so early in their career.

"If we squeeze people into these pathways we shouldn't be surprised if people break free, and we shouldn't be surprised that we're developing a workforce that isn't particularly happy," he said.

On this point, the young people's health advocate Shah later said that she knew of pockets of good practice around the country where training programmes were encouraging fulfilling careers and were supportive of career breaks. "There's a lot we can do, and a lot of upcoming leaders," she said.

Toby Hillman, a consultant physician at University College London Hospitals NHS Foundation Trust, said that it was time to be honest: that it was not sustainable for doctors to spend their whole career in clinical practice.

"I just wonder how, with the workforce issues that we have, we can have the flexibility that is demanded for all of these different, great ideas," he said.

Abi Rimmer, editor, BMJ Careers, *The BMJ*
arimmer@bmj.com
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BMJ OPINION

Hannah Wilson and Arabella Simpkin

Why are doctors quitting in droves?

A multitude of factors have been put forward to try to explain what is causing the exodus. Changes to junior doctors' salaries, hours worked, a reduced investment in training, inflexibility with schedules, lack of consistent teamwork, and an understaffed service all contribute. But perhaps what underpins it all, driving the discontent and dissatisfaction, is a lack of feeling valued and supported. Three out of 10 doctors have said they feel unsupported by management each week, and that they feel the mentoring provided to them has decreased.

Blaming burnout

Further, little attention has been paid to the fact that many high achieving doctors leave their jobs in the NHS and either enter into another competitive and equally intensive job or perform the same job overseas. It is often assumed that the doctors who quit have simply "burnt out", the zeitgeist of the 21st century, taking blame for the exodus of junior doctors.

Recently, however, attention has been given to the often limited understanding that researchers have when citing burnout as a cause. Imagine a 35 year old cardiology registrar, their medical degree from a highly ranked UK university, a first class honours achieved at graduation, now working at the top deanery, with a collection of first author publications and a list of international awards. One day they write to the deanery announcing their resignation—no failed exams, no failed competencies, a plethora of excellent feedback—no warning signs. They pack their bags and take their highly developed skills across the ocean to embark on the same intensive career, treating similar patients with similar healthcare needs. Is this a doctor who is burnt out? Burnt out of working in the NHS, yes; but burnt out and unable to use their talents as a doctor ... perhaps not.

Surprisingly, while there is literature that discusses both the quantity of doctors that leave the NHS and the factors that may drive them, there is no literature discussing the attributes and characteristics of doctors that leave. To understand what is driving the flight, we first must ask who are the doctors that quit? Surprisingly, exit interviews are rarely held. Yet this is critical information to develop interventions and strategies to stem the leak.

Hannah Wilson is an academic junior doctor
Arabella Simpkin is an instructor in medicine at Harvard Medical School

EDITORIAL

Sex, gender, and sports

New regulations challenge the evidence based, benevolent ethos that underlies medical practice

In 2018, the International Association of Athletics Federations (IAAF) introduced new eligibility regulations for female athletes with differences of sex development.[1]

The regulations are based on the contention that women with high levels of endogenous testosterone and androgen sensitivity have a performance advantage over peers. Athletics South Africa and Mokgadi Caster Semenya (right), the runner who won Olympic gold medals in 2012 and 2016, are contesting the legality of the new regulations.

The basis for their claim is a lack of scientific evidence showing that endogenous testosterone concentrations substantially enhance sports performance. This is in alignment with the 2015 judgment of the Court of Arbitration for Sport on the case of Dutee Chand *v* Athletics Federation of India and the IAAF.[2] The IAAF has delayed the implementation of the 2018 regulations until the outcome of the Court of Arbitration for Sport hearing on their legality is determined; this is expected on 26 March.

New eligibility criteria

The new eligibility criteria emphasise two unresolved sex hormone controversies: normal serum testosterone levels and physiological androgen sensitivity. The threshold that defines raised concentrations of circulating testosterone is arbitrarily set at 5 nmol/L. However, serum concentrations of testosterone vary naturally in men and women, and across athletic states. In non-athletes, serum testosterone values range bimodally from 8.8 to 30.9 nmol/L in men and boys and from 0.4 to 2.0 nmol/L in girls and women.[3] But there is greater overlap among elite track and field athletes after competition, with mean (standard deviation) values 12.8 (7.9) nmol/L in men and 4.1 (4.9) nmol/L in women.[4] Based on reference ranges above 8.4 nmol/L for men and below 2.7 nmol/L for women, testosterone concentrations would be categorised as low in 16.5% of men and high in 13.7% of women.[4] Causal associations between serum testosterone and medal winning based on these reference cut-offs cannot be determined because these types of analyses stipulate anonymity to protect participants.

The requirement to prove androgen sensitivity in athletes is also problematic since reproducible, valid laboratory tests to detect androgen sensitivity do not exist. To diagnose female athletes with androgen sensitivity, the IAAF mandates a physical examination, gynaecological assessment, and radiological imaging for women who have high testosterone levels on antidoping tests. There has been much criticism of this approach.

What is equally concerning is the lack of evidence that these physical signs are related to circulating testosterone levels, androgen receptor signalling, or the genetic regulation of muscle and red blood cell activity, particularly in women with partial or complete androgen receptor insensitivity or 5α-reductase deficiency.

The paucity of reproducible scientific data on the effect of testosterone on speed during track and field events poses an additional challenge. Given the many other variables that affect athletic performance, the 2015 Court of Arbitration for Sport panel said that although a 1% difference in event times may not justify a separation of categories of female athletes, a 10% difference in athletic performance justifies having separate male and female categories because of unfair advantage.[7] No guidance exists on the grey zone between 1% and 10%.

Serum concentrations of testosterone vary naturally in men and women, and across athletic states

An analysis commissioned by the IAAF to ascertain the quantitative relation between endogenous testosterone and enhanced athletic performance indicated that women whose serum testosterone levels were in the top third performed significantly better ($P<0.05$) than women with levels in the lowest third. However, the results could not be independently reproduced, and the data do not reliably mirror the source track times of athletes from the 2011 and 2013 world championships.[7] The authors of the analysis subsequently acknowledged data errors, driving accusations of alleged data mongering and a potential breach of scientific integrity by the IAAF.[7]

Sitting at the intersection of biological sex and gender identity, the 2018 IAAF regulations challenge the evidence based, benevolent ethos that underlies medical practice. The medical profession does not define biological sex or physical function by serum testosterone levels alone. If more science is needed to develop an objective measure of androgen sensitivity, then call for health research organisations to deliver on this mandate.

History compels us to ensure that decisions about genetic superiority are supported by objective, rigorous, and reproducible data. Although this is purely conjecture, we venture that the Olympian gods smile down on winners like Mokgadi Caster Semenya when they perform extraordinary feats of human endeavour.

Cara Tannenbaum, professor of medicine and pharmacy, Université de Montreal
cara.tannenbaum@umontreal.ca

Sheree Bekker, prize research fellow, Department for Health, University of Bath

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EDITORIAL

Calling time on formula milk advertisements

The BMJ and our sister journals will no longer carry ads for breast milk substitutes

Nearly 40 years since the introduction of an international code to regulate the marketing of breast milk substitutes, concerns have resurfaced over the aggressive promotion of these products, and the harmful effect on global rates of breastfeeding. After decades of advertising breast milk substitutes to readers of *The BMJ*, we have decided it is time to stop.

In 1981, the World Health Organization and Unicef launched the International Code of Marketing of Breast milk Substitutes, which explicitly bans advertising and other forms of promotion of these products to the general public. The code aimed to rein in unethical behaviour by industry that had coincided with a general decline in breastfeeding rates.[1 2]

According to the code, breast milk substitutes include all milks that may replace breast milk in the first three years of life. We use the term "formula milk" here as a shorthand for all these products.

Countries were expected to adopt the code into national law, although these hopes were never fully realised.

Concern is growing that industry continues to stretch and violate the rules.[3] However, the monitoring of legislation is weak, and companies are rarely prosecuted for breaches.[4] This allows the $50bn (£38bn) a year industry to pursue customers without fear of sanction.[5] There is no official mechanism to ratify whether code standards are truly being met.

Blunt instrument

The code says that breast milk substitutes cannot be advertised to parents or the wider public. But few manufacturers abide by this, despite claims of compliance on the websites of many leading brands.

Crucially, formula companies interpret the code to apply only to infant formula, a product that is suitable for infants throughout the first year of life but which companies commonly describe as suitable for "the first six months" so they can legally promote a wholly unnecessary alternative product called follow-on formula.

Aggressive formula mil promotion has a harmful effect on breastfeeding rates

Decisions on when and how to use infant formula are best informed by sources of unbiased evidence rather than advertisements

This is direct-to-consumer advertising of infant formula in all but name, since these products are cross-branded and almost indistinguishable. WHO recommends that mothers breastfeed exclusively for the first six months, continue breastfeeding alongside complementary foods in the first year, and continue breastfeeding up to age 2 years or beyond.

Non-promotional information

The code allows the provision of "scientific and factual" information to health professionals but is very clear that this must not be promotional. Advertisements are by their nature promotional, with a high prevalence of unjustified claims of benefit and without full disclosure of the risks.

The BMJ has recently been reminded of the substantial harms caused by promotion of breast milk substitutes and the biases introduced into research and clinical practice by industry influence.[3 12] We have also gained a greater understanding of the WHO code that seeks to reduce these harms and have reviewed our policy, consulting advertisers and canvassing readers.

As a result, we have decided to stop carrying these advertisements in *The BMJ* and other BMJ journals, including *Gut*, *Frontline Gastroenterology*, and *Archives of Diseases in Childhood,* as soon as possible. We have chosen a complete ban because previous attempts to implement a due diligence approach have failed. This will have a substantial effect on our revenues—a loss of an estimated £300 000 in 2020.

The ban on product advertising is not a boycott of the companies themselves. We will honour existing contracts for formula milk advertising, but the final advert will appear later this year. We are not alone in doing this: in February the RCPCH announced it would no longer accept funding from formula milk companies at a loss of £40 000 a year through event sponsorship and advertising.[13]

Our objective is not to drive an anti-formula campaign, as we recognise that formula milks are essential products for children with complex medical or nutritional needs and for those women for whom breastfeeding is not possible. But decisions on when and how to use infant formula are best informed by sources of unbiased evidence rather than commercial advertisements.

We believe this is the right thing to do based on our desire to support the WHO code, actively promote breastfeeding, and campaign against industry influence in this area. Instead of being part of the problem, we want to be part of the solution.

Fiona Godlee, editor in chief
Sophie Cook, head of scholarly comment
scook@bmj.com
Rebecca Coombes, head of news and views, *The BMJ*
Emad El-Omar, editor in chief, *Gut*, London
Nick Brown, editor in chief, *Archives of Diseases in Childhood*, London

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INVESTIGATION

Questions over future of global diabetes group as founding members resign

As the numbers of people with the disease worldwide soar, the global campaigning organisation at the forefront of response, is tearing itself apart. **Melanie Newman** investigates

For almost 70 years, the International Diabetes Federation (IDF) has led global efforts to combat diabetes. But its work has been so seriously undermined by internal conflict and the resignation of several founding members that its supporters are now questioning whether the organisation will survive.

An umbrella organisation of more than 200 diabetes associations from some 160 countries, IDF's activities have ranged from lobbying the UN to initiatives such as Life for a Child, which helps children with diabetes in lower income countries to access treatment. Raising sufficient funds has been a challenge, and the institution has been dogged by accusations of cosiness with the drug industry.

Several founding members, including Diabetes UK, have left the federation in the past two years, others are considering doing so

Widespread disquiet

Now, after conversations with dozens of people from inside and outside the IDF and having seen some of the relevant documents, *The BMJ* can reveal widespread disquiet about the organisation's governance under current president, Nam Cho (from Korea), and his predecessor, Shaukat Sadikot (from India).

Both men have made or tried to make highly contentious changes to IDF activities, programmes, and staffing since 2016. In the past few years, national diabetes associations from the UK, Netherlands, and Denmark have all cut ties with the federation. The German association is monitoring the situation "very closely."

Mostly recently, the leadership has attempted to remove elected board members—including Cho's planned successor, Andrew Boulton, professor of medicine at Manchester University—and to take control of Life for a Child away from its longstanding operator and funder, Diabetes New South Wales. Other controversial changes include the federation's withdrawal from the Non-Communicable Diseases Alliance, a high level lobbying organisation founded by Ann Keeling, a former IDF chief executive.

Critics say some of these actions have been taken without clear authority and with insufficient transparency. A drug company's large overpayment to the IDF, which came to light in 2016, also became a source of discontent when both Cho and Sadikot made semipublic references to fraud despite no evidence of this having been found.

As a result, several of the IDF's founding members, including Diabetes UK, have left the federation in the past two years, others are considering doing so, and board members have resigned. Life for a Child's operators have announced plans to remove the programme from IDF's auspices.

The departures have been noticed externally: "According to our partners, IDF is losing visibility," said the federation's July 2018 board minutes. Time spent managing conflict on so many levels is likely to have distracted the IDF board from its advocacy work.

Stéphane Besançon, director general of French non-governmental organisation Santé Diabète in Mali, attended the high level summit on non-communicable disease in New York during the UN general assembly in September 2018. He tells *The BMJ*, "IDF was not present enough for advocacy around this meeting."

He also thinks "IDF does not do enough on the ground in low income countries." Aside from Life for a Child and Bridges 2, a joint Eli Lilly-IDF project that funds research on diabetes prevention, little else is being done in the field, he says.

Abolition of chief executive role

For some IDF critics the first sign of trouble came at the inaugural board meeting of Sadikot's presidency in January 2016, when the chief executive was dismissed and her position abolished. The result, according to reports from the IDF's executive office report, was "continuous operational interference."

"There seems to be a 'board within the board,' a group of members that are being consulted and guided on decision making by the president and president elect," the same document added. This had created "an organizational culture of suspicion and distrust," it said, and the disconnect had been noticed by funding partners.

Diabetes associations from the US, UK, Canada, Malta, Denmark, and several Nordic countries wrote to the board arguing for the chief executive role to be retained. But in a postal ballot held that September most national associations voted in

CUTTING TIES

The European national organisations that have left the international umbrella group are:

Diabetesvereniging Nederland | Danish Diabetes Association | DIABETES UK CARE. CONNECT. CAMPAIGN.

STEVE VIDLER/ALAMY

favour of changes to the articles of association that allowed the board to act as chief executive.

Conflicts of interest

Meanwhile concerns were also emerging over the board's approach to conflicts of interest. The IDF provided board members, staff, and patients to speak at industry events. Historically, any speaker fees were paid to the IDF.

The December 2016 executive report states that Novo Nordisk was forced to write into a contract that federation representatives could not claim for honorary fees after at least one IDF speaker claimed a personal honorarium for speaking.

The BMJ asked Cho and Sadikot if they had been personally paid by any drug company since 2016 and, if so, whether conflict of interest declarations had been made to the IDF. No reply has been received.

Another industry related issue also emerged in 2016 that substantially widened the divide between Sadikot and the British contingent.

In 2015 AstraZeneca overpaid €1m (£860 000) to the IDF, information about which, for unclear reasons, was not communicated promptly to the board. The matter was investigated by Mazars, the IDF's auditors, with no evidence of fraud uncovered.

Sadikot later highlighted the AstraZeneca overpayment as evidence of mismanagement during the previous presidency of Michael Hirst. Hirst strongly denied the accusation.

In December 2016 two British vice presidents for finance and strategic governance, resigned citing Sadikot's handling of the overpayment and the removal of the chief executive post.

A Dutch lay vice president also quit, stating in her resignation letter that she was "astonished and shocked" that the president had discussed fraud and financial problems in front of corporate partners at a recent meeting when she as a board member knew nothing about it. The Dutch Diabetes Association disaffiliated from IDF shortly afterwards. *The BMJ* asked the IDF to respond to this allegation but no response was received.

Fast forward to January 2018, and one of Cho's first actions as president was to declare the election of the vice president for finance, Graham Spooner, illegitimate because he had postgraduate accountancy qualifications but not an accounting degree.

Cho's refusal to recognise Spooner's appointment developed into an increasingly vitriolic dispute with the IDF's nominating committee, headed by Hirst. The row played out in a semipublic sphere throughout the first half of 2018, with accusations of racism, financial mismanagement, and abuse of expenses flung by players on both sides of the dispute in emails copied to the membership.

"Illegal actions, misuse of funds, and racial discrimination has no place in an international organization," said one typically cryptic letter from Cho to all IDF member associations.

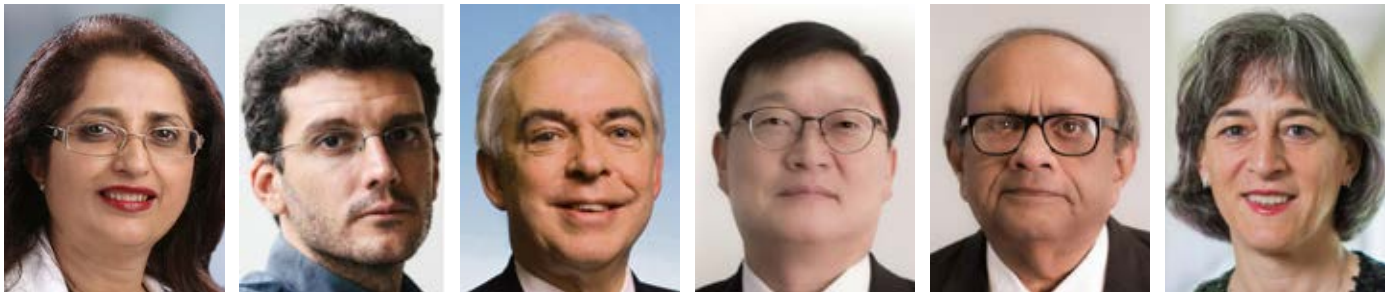
Six former IDF presidents, including Hirst, and three honorary presidents wrote asking Cho to make available legal advice he said he had taken before firing Spooner, which to date he has not done.

After calling on Cho to "end this divisive and embarrassing behaviour," Diabetes UK ended its membership in March 2018. "IDF is no longer able to demonstrate the minimum level of robust and transparent governance," its resignation letter said.

A few months later the French national association told the IDF it would suspend its membership and withdraw completely at the end of the year if its questions about various matters were not answered. These included the Spooner affair, a partnership agreement with the service organisation Lions Club International made without consulting member organisations, a lack of patients on the IDF board, and dependence on pharmaceutical funding.

Cho responded personally. "Today's world is not like it was in 1950," he wrote, adding: "You state you will suspend your membership

IDF does not do enough on the ground in low income countries
Stéphane Besançon, Santé Diabète



From left: Niti Pall, IDF Europe chair elect; Stéphane Besançon, Santé Diabète, Mali; Andrew Boulton, IDF president elect; Nam Cho, IDF president; Shaukat Sadikot, former IDF president; and Juleen Zierath, president of the European Association for the Study of Diabetes

until you receive a response . . . well, one member association does not control the board of IDF. The IDF is financially sound, transparent in its actions, and will not tolerate such naive threats."

Life for a Child dispute

Some people who spoke to *The BMJ* believe the current IDF leadership is driven by anti-Western sentiment and wants to reduce European and Australian influence. "We are viewed as imperialists," one complains. Others suggest different cultural attitudes to governance might be at the root of the conflict. Another blames the federation's structure, under which the board is elected by members, and a "cult of president." "The presidents can do what they like—the post is an ego trip," he says.

Whatever the reason, Australian-run Life for a Child became the next flashpoint for dispute. Until 2018, IDF's role in the project was limited to passing on funds from donors and some staff support. Under Cho IDF decided to take control of it, sidelining long term operator Diabetes New South Wales.

The result was "a breakdown in program governance leading to several supply shortages," Diabetes NSW wrote to the IDF in September 2018. "Moreover, the IDF has not provided a clear strategic direction or management framework for the program's future, despite repeated requests."

Life for a Child would now operate solely under the auspices of the Australian body, the letter added. Drug company Lilly, which provides Life for a Child with insulin and test strips, told *TheBMJ* it supported the change.

The IDF nevertheless informed members that Life for a Child was moving to Brussels and told Diabetes NSW it would continue to run a programme under that name. In practice this means there will now be two operations fulfilling a similar function. IDF and Diabetes NSW are in dispute over ownership of the name and logo of Life for a Child.

Meanwhile, the withdrawal of Diabetes UK caused an escalation of hostilities against senior British IDF members. In September 2018, the federation's vice president for governance wrote to president elect Andrew Boulton, board member Angus Forbes, and Niti Pall, chair elect of IDF Europe. All three were asked to resign on grounds that their membership of Diabetes UK represented an unacceptable conflict of interest. Legal advice had been taken, the letter said.

Two months earlier the board had voted down a proposal to remove the three but agreed legal advice should be sought. *The BMJ* understands that despite requests the legal opinion has not been shown to board members.

To date, the trio have not resigned, but the move against them prompted the Danish Diabetes Association to cut ties with the IDF. "As soon as we are confident about the re-instalment of good governance in IDF Global we will reconsider our membership," the Danes wrote.

Their resignation had little effect, with Cho reportedly now proposing to amend the IDF's articles of associations and operating procedures to mandate the removals.

If the three are forced out *The BMJ* understands more associations are likely to resign, further weakening the IDF's mandate as a global voice.

German Diabetes Aid says it has "reduced its interactions with and support to IDF to the absolute minimum and is watching the current situation very closely." Should elected board members lose their current positions it says it would reconsider its position.

The presidents can do what they like—the post is an ego trip
IDF member

Juleen Zierath, president of the European Association for the Study of Diabetes, says: "We are concerned about the governance of IDF. We are keeping a careful watch on the situation and are reconsidering our position frequently."

The final nail

A former board member says if the "unconstitutional and egregious" attempt to oust Boulton is successful "it would drive the final nail into the coffin of corporate support" for IDF. Already struggling to cope with a long term decline in external funding and falling attendance at its biannual congress, the IDF can ill afford to lose further support. But it may already be too late.

Cho's latest move is to launch legal action against Hirst in respect of alleged mismanagement during his presidency. Hirst is accused of mismanaging the AstraZeneca overpayment. The IDF is claiming damages of just €1. Describing the action as "vexatious" Hirst says: "There was no loss, financial or accounting, and the matter was handled perfectly properly by IDF."

If the IDF loses the case it may have to fund Hirst's legal expenses as well as its own.

"We should start again," says one former board member. "Diabetes needs a new advocacy organisation without all these past presidents hanging around."

Melanie Newman, journalist, London
melanienewman999@gmail.com
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