HealthSense

Registered Charity No 1003392

HealthSense Newsletter

for Science and Integrity in Healthcare

Issue 121, Winter 2022-3

Concern over unregulated high street health checks

An investigation (1) by the *British Medical Journal* has found that dozens of UK companies are offering private blood tests for a range of conditions and deficiencies, with some making misleading claims, and leaving the overworked NHS to follow up "abnormal results."

Examples of private testing highlighted by investigative journalist Emma Wilkinson include regular blood tests which promise to predict how many healthy years of life a person has left, and a tiredness and fatigue finger prick test that measures iron, thyroid hormones, vitamin levels, and inflammation. Many of these tests are not recommended by the National Screening Committee "because it is not clear that the benefits outweigh the harms" yet patients often turn to their GPs to review the results of private blood tests, creating more work for an already stretched NHS.

In a linked opinion article,(2) HealthSense patron Dr Margaret McCartney and colleagues say the NHS "needs to robustly explain the criteria for high quality screening and testing, and explain when consumers should be sceptical and what they should question." They argue that the Care Quality Commission (CQC) should be empowered to appraise the apps that promote private screening as well as the screening companies themselves, and say placing a responsibility on companies to undertake the further investigation of abnormal test rest results "could help reduce negative impact on the NHS."

1. Wilkinson E. Investigation: The rise of direct-to-consumer testing: is the NHS paying the price? BMJ 2022;379:o2518
2. McCartney M, Watson J, Finney B, Salisbury C. Opinion: Why blood testing companies need effective regulation *BMJ* 2022;379:o2517

HealthSense awards for Dame Sally Davies and top students

This year's venue, the Victory Services Club in London, let us break with tradition by holding our awards in a smaller room that was warm, intimate and very sociable, with audience members seated at table and presenters up close. All agreed it was a success.

The quality of the resulting video recording was excellent and we recommend it on our YouTube channel for anyone who couldn't be there on the night.

Our three Student Prize winners, all from London medical schools, joined us to accept their cheques and certificates. This issue carries a report about them and the prize.

The 2022 HealthSense Award went to a leading figure in global health, Dame Sally Davies. Founder of the National Institute of Health Research (NIHR) and past Chief Medical Officer for England and Senior Medical Advisor to the UK Government, Dame Sally said, "I am honoured to receive this important award. Important because of the focus on evidence and communication with the public." When asked about how evidence has been used to guide health policy in recent years, she told HealthSense, "I am proud of how, in England, we use evidence to guide National Health policies. In addition, where evidence is lacking, the NIHR regularly commissions research and evaluations to update the evidence base."

In Dame Sally's acceptance presentation she addressed us from her role as the UK's Special Envoy on Antimicrobial Resistance and as a Member of the United Nations Global Leaders Group on AMR. The text of her talk in full is published in this issue.

In this issue:

News in brief

Remembering Mike Rawlins

A patron of our charity since 2012, Professor Sir Michael Rawlins died on 1 January 2023. Former chair of NICE and president of the Royal Society of Medicine, tributes have poured in with memories of him as a fine clinician and important medical leader. He was an involved and enthusiastic patron of HealthSense. He took part, with fellow patron Professor Steve Jones, in our first ever public debate at Kings College London back in 2013, and again in our debate on Lord Saatchi's Medical Intervention Bill in March 2015 (which can be seen on our YouTube channel). An obituary is being prepared for our next issue.

RCOG promoting costly multivitamins

Obstetrician Susan Bewley shared her concern that the Royal College of Obstetrics & Gynaecology (RCOG) is promoting costly pregnancy multivitamins on their website. They devote a page headed "Bassetts Vitamins Pregnancy" to a product with a retail price of £14 for a 30-day supply, with links to the manufacturer's website. We asked the RCOG via twitter "Why are you promoting Bassetts Vitamins Pregnancy? £14 a pack (Boots' own comparable product is £3.80). How is this supporting good maternal nutrition during pregnancy?" but they have not yet responded. While it is advisable to supplement with folic acid and vitamin D in pregnancy, benefits from taking multivitamins are doubtful.

HealthSense on Mastodon

Frustrated with the latest developments on Twitter, many social media users are on the move. Mastodon is a free-to-use and ad-free alternative that has been popular among academics for some years but is now coming into its own. If you are thinking of diving in, PLOS blogger Hilda Bastian has written a great how-to: Some Shortcuts to Giving Mastodon a Try. And once you're in, you can follow HealthSense at @healthsense@mastodon.online

Medico-legal thrills

Medico-legal expert Diana Brahams, who served on our committee for two decades, has turned her hand to fiction. Her new thriller explores some of the moral and legal dilemmas facing big pharma. In "Dead Thin" a clinical trial of a new slimming pill is jeopardized when an investigation suggests there has been a cover-up of harmful side effects. Dead Thin was published 7 October 2022 and is available from Amazon (paperback £8.99) and on kindle (£3.50).

Publication ethics and a "fake badge of integrity"?

In a new blog article, research misconduct whistleblower Dr Peter Wilmshurst raises concerns that a charity set up to maintain high standards in academic publications might have become a way for unprincipled journals to buy themselves a "fake badge of integrity". The Committee On Publication Ethics was formed by a small group of concerned editors in 1997 and Peter was welcomed as a member at the outset for his work exposing research misconduct, but was suddenly ejected in 2018. Was this related to his having just written to highlight a member journal's unwillingness to retract a dangerously fraudulent research publication, he asks? COPE's sudden ousting of a scientist with such a distinguished history of exposing unethical practices certainly raises questions.

For a glimpse into this history you can now watch "a searing presentation" in which Wilmshurst talks about his experiences of exposing medical fraud, recorded at a Research Integrity Workshop in Liverpool on 5th December. A YouTube recording (duration 1hr 45minutes) is online, including the question and answer session that followed. Professor Dorothy Bishop, developmental neuropsychologist, was at the workshop and has published a full report with some of Peter's most shocking revelations in her recent blog.

Together Against Cancer engage on charity concerns

Positive engagement is bringing results after we raised concerns about some of the advice that was being given to cancer patients on a charity website. We were delighted that Together Against Cancer welcomed our request that they review some elements of their site. They have now removed references to nutrition sessions and no longer offer one-to-one nutrition consultations. We look forward to a constructive dialogue going forward. Thanks to Les Rose and Susan Bewley for writing to the charity.

EU waters down cancer screening advice

HealthSense welcomes news that the European Commission has watered down recommendations for extending cancer screening. In September 2022 the Commission had published recommendations for 90% of the eligible EU population to be screened for breast, prostate, cervical and colorectal cancer by 2025. HealthSense members will know of our concerns that the harms resulting from population screening – particularly for breast and prostate cancer – are poorly understood by the public and not given sufficient consideration by healthcare providers.

So we were cheered to learn from French campaigners Cancer Rose that against all expectations, the Council of the European Union has rejected proposals for the implementation of new screening tests for which there is no program, such as prostate cancer, and has rejected extending the age range for breast screening. In an Appendix to the Commission's announcement made in December, member states emphasized the need for further evidence for screening strategies already in use, and information on the risks of screening, the notion of overdiagnosis and overtreatment, and the need for decision aids and information for patients deciding on whether to be screened.

Online viewing

The wind that shook the sugary willows

In 2018, a small group of French healthcare professionals joined on Twitter to write and publish in the Figaro Santé an op-ed calling on institutions to stop funding treatments not based on evidence. Unions of homeopaths across France, in anger, threatened to sue one author after another. A national media debate ensued. The "No Fakemed Collective" was formed to fight disinformation in healthcare. But what happened next? The full story was told in a 55-minute Consilium Scientific seminar on 17 November, "The wind that shook the sugary willows" by Dr Pierre de Bremond d'Ars, the Paris GP who was there from the start.

Links to transcripts and slides as well as full recordings are now available for most of Consilium's 2022 seminars. Consilium Scientific is a non-profit for research and education which aims to inform and enact health policy change in the UK and worldwide. They are a partner organization to HealthSense.

Tolerating bad health research: the continuing scandal

How much research is bad? Most of it, concluded Stefania Pirosca and Shaun Treweek in their recent paper "Tolerating bad health research: the continuing scandal". They reached that conclusion after studying 1640 trials in 96 systematic reviews, and they explain their findings and what to do about bad research in a 30-minute webinar, recording now online. The event was hosted by the Irish Health Research Board's Trials Methodology Research Network, on 1 December 2022.

Silicon Valley catastrophe

The Silicon Valley methodology of "move fast and break things" could be catastrophic for healthcare, says Rohin Francis, the cardiologist, comedian, and creator of the YouTube "Medlife Crisis" 10-minute myth-busting videos. He was speaking at a two-day online event by non-profit The Healthcare Improvement Studies Institute (THIS) at the University of Cambridge. Watch recordings of his and the 15 other speakers on the THIS YouTube page.

2022 Award Winner

From laboratory to United Nations: everyone's role in tackling AMR

The HealthSense Award 2022 went to a leading figure in global health, Dame Sally Davies. Founder of the National Institute of Health Research (NIHR) and past Chief Medical Officer for England and Senior Medical Advisor to the UK Government, Dame Sally told HealthSense members, "I am honoured to receive this important award. Important because of the focus on evidence and communication with the public."

The following is the text of her talk, given at the Victory Services Club, London, on 30 November 2022. The full recording of the HealthSense 2022 Awards Night, including this presentation, can be experienced on the HealthSense YouTube channel.

I have been advocating for global action on anti-microbial resistance (AMR) for almost a decade, including as the United Kingdom's Chief Medical Officer from 2011 to 2019. In that role I led the Ebola response, oversaw the Novichok tragedy, and introduced the sugar levy to tackle obesity.

Yet, it is AMR that remains my and the world's biggest challenge.

We in the UK have made good progress on tackling AMR to date. Our One Health Action Plan on AMR is now being updated while the EU has recently enacted ground-breaking legislation to ban the use of antibiotics as growth promoters for food-producing animals.

The efforts of policymakers, researchers, industry, and healthcare workers have never been more necessary. We are seeing globally the impacts of an initially untreatable infection. But it is clear that COVID-19 will not be the last pandemic that our world will face. It might be easy to ignore the quieter pandemic of AMR, but we know that without effective antibiotics, our health, food and environment systems, and economies, would grind to a halt.

AMR a bigger killer than HIV, TB or malaria

Earlier this year, the world's first and most comprehensive estimates of the global burden of AMR to date were published. Researchers from Oxford University and the Institute of Health Metrics and Evaluation at the University of Washington analysed 204 countries and 471 million individual health records to reveal truly harrowing data. Over 1.2 million deaths were directly attributed to AMR in 2019 – making bacterial AMR a bigger killer than HIV, TB, or malaria.

Whilst the highest burden of AMR was beyond the borders of Europe and North America, this is a problem for all of us. We will all bear the social and economic costs of AMR if we do not work together to contain and control it. Of note, Methicillin-resistant S. aureus remains a significant global burden but is not on the WHO's priority list for developing new and effective antibiotic treatments. So, this new data must be a wake-up call to the world for how and where we must target and tackle infections.

With the bleak picture these data depict, we have got to use evidence to inform our national and regional actions. It is especially important that we can point to the impact of AMR on our interconnected systems, with AMR both driving and being driven by negative externalities across human, animal, and environmental health systems.

Antibiotic-polluted rivers

In fact, this year saw a new major study of over 250 rivers from over 100 countries found that over one quarter of these rivers were polluted to toxic levels

from antibiotic residues. Madrid has the most polluted river in Europe, ranking in the top 10 per cent of global places with the highest cumulative concentrations of Active Pharmaceutical Ingredients. Glasgow also came in the top 20 per cent globally.

The insights from this study can and should help incentivise action at local, national, regional, and global levels. We'll need to invest smartly for the future and invest in systemic solutions, such as infection prevention and control; improved sanitation and access to water; and R&D for diagnostics, novel therapeutics, and vaccines. And the interventions and infrastructure that we need to tackle AMR will also build our capability to tackle other future global challenges, including pandemics.

We can no longer afford to mortgage the future of our planet by running our medicine cabinets empty, toxifying the environment, or intensively farming animals in breeding grounds of infection. If we want a sustainable and secure future, then we need to mobilise for solutions now.

Most new antibiotics are not available in all parts of the world

Let us start with research and development. The global scientific community was able to develop COVID-19 vaccines rapidly because they were built on years of earlier investment and research. But, as it stands, most new antibiotics are not available in all parts of the world. Of the 25 new chemical entities developed between 1999 and 2014, only twelve had registered sales in more than ten countries. Countries even in Europe do not benefit from novel antibiotics, because country-by-country registration is too costly.

If we need a new antibiotic tomorrow, the ship has already sailed. Only five of the twelve antibiotics companies that have gone public in the last decade are still active.

It is an unviable market for large companies, let alone for Small and Medium Sized Enterprises, who account for 75% of all late-stage antibiotics in the R&D pipeline. Because of their limited funding, these SMEs understandably channel most of their efforts into discovering and developing new products. This leaves little for commercialisation and distribution – only 25% of late-stage antibiotic projects have stewardship and access plans. An analysis of European public funding indicated that 86% of national-level funding for antibiotics was directed at basic research – leaving a glaring gap for the SMEs who develop this research into usable, and potentially accessible, products.

"The world is failing on AMR"

That's why the WHO have said that 'the world is failing on AMR'. Last year, I laid this out loud and clear to the Health Ministers and Commissioner of the G7. I challenged them to work together, and to work with industry and their Finance Ministerial colleagues to balance innovation, access, and stewardship. I urged them to build on the advances made in R&D for COVID-19 by acting strongly, and across disciplines.

So, to address these economic problems the G7 countries, including the EU, are seeking to improve the market conditions for antibiotic development. Our G7 Finance Ministers made commitments on AMR for the first time ever – emphasising the role of pull incentives that could be piloted across their economies and health systems, designed to ensure a sustainable pipeline of new and equitably accessible antimicrobials.

We'll be driving forward progress that is already starting to be made, like Germany's reimbursement model and Sweden's access pilot. In the UK, our innovative 'Netflix model' is a world-first system to pay for antibiotics by subscription – based on their value to society, not on the volume of pills used. This approach benefits NHS patients by guaranteeing both sustainable use and sustainable supply of antibiotics – by embedding stewardship and by giving companies certainty of demand. Following a rigorous process with expert clinical input, two treatments – Cefiderocol (Fetcroja) manufactured by Shionogi, and ceftazidime with avibactam (Zavicefta) manufactured by Pfizer – have been signed under contract and will now be available to patients in the UK.

Tipping point

With the PASTEUR Act also in the US Congress, we are reaching a tipping point where big markets can show industry that antibiotic R&D is worth it. I am also delighted that the G7 has committed to build knowledge about AMR in the environment and explore international standards on the safe concentrations of antimicrobials released into the environment from pharmaceutical manufacturing or from healthcare facilities. More research, evidence, and monitoring of the impact of AMR on climate change is needed – and we need industry to step up and play their part to ensure compliance with safe limits of antibiotic pollution too.

You know as well as I do that every day counts in a pandemic. It is so important to have surveillance producing data that is openly accessibly. That's why our UK Fleming Fund is a major international aid investment dedicated to AMR is supporting countries across Africa and Southeast Asia to build laboratory capacity, infrastructure, and capability to generate data, share data and use data to inform national and global decision-making.

Across 24 countries, we are bringing evidence and people together to support countries with laboratory equipment and skills. For politicians and policymakers, accessible data provides an understanding and ownership of the challenge. On the ground, data empowers healthcare workers with the tools they need to drive solutions that work for the context they are facing.

A "One Health" approach

Through the UN Global Leaders Group, we are working to ensure that AMR, including surveillance, is embedded in any future pandemic legal instrument that countries are currently negotiating. The Global Leaders Group is pushing for this accord to take a 'One Health'

approach that benefits AMR too. We do not know what the next pandemic will be, but it could well be drug-resistant, or depend on antibiotics to treat hospitalised patients with secondary bacterial infections. So, if we have legal obligations for surveillance – these should be like Christmas tree lights: always shining and working for AMR, but then flashing and pivoting when an outbreak occurs. We also need to ensure that equitable access underpins any provisions here.

This multi-sectoral approach is so important because 80% of antibiotics are used in animals, rather than for humans. I am also proud that new data released last week shows that sales of veterinary antibiotics in food-producing animals in the UK is at its lowest ever recorded figure. Since 2014, we have seen an 83% decrease in the sales of antibiotics which are of critical importance in human health. We too are committed to reducing unnecessary use of antibiotics in animals and it remains our intention to strengthen our national law in this area, including around prophylaxis.

We can't underestimate the role of investors and industry in this too. McDonald's have announced a policy to eliminate the use of the Highest Priority Critically Important Antibiotics, as defined by the WHO, in their chicken by 2027. We need this to remain on track, or even accelerate. As more people take an active interest in the ethics of their food, more companies are willing to act — or at least pressured into acting for fear of losing their reputation.

Pressuring shareholders and investors

I have even been working with my students from Trinity College, Cambridge to advocate for the responsible use of the university's endowment fund. They have gone to the AGMs of YUM!, which is the parent company of KFC, McDonald's, and Pizza Hut, to pressure their shareholders to agree to carry out a gap analysis that would report on the use of antibiotics in its supply chains. As a result, YUM! became the first public company to agree to disclose its impact on the broad economy and diversified shareholders. This is real leadership from the youth, and I hope you will join us and encourage other students to take a stand here.

From the UK, we have launched the Investor Action on AMR initiative. We are calling on investors to commit to making sustainable investments and align with global best practices on AMR by incorporating AMR into their ESG standards. To date, 15 investors from across the world with a collective asset portfolio of over $11 trillion have signed up. We would love to see more investors from across the EU join us.

The global response needs commitment and action from everyone, everywhere. The AMR community is strong, but there is plenty of room for more people to join us. Despite the growing political action on AMR, there is still inequity in access to knowledge and education about AMR. Public engagement does not currently match the scale of the threat, and this will directly impact our ability to change behaviours and policies.

The Mould that Changed the World

Recently, I was in Washington D.C., where I am delighted to have supported a truly out-of-the-box solution to the extraordinary problem of AMR. We staged the musical, The Mould That Changed The World, in a local theatre to audiences in their hundreds. Using creative storytelling and song, the musical tells the story of Alexander Fleming's life and his discovery of penicillin – and the eventual human toll of resistance.

By marrying the arts and the sciences, the musical is bringing new audiences into a movement for change. Alongside professional actors, local healthcare workers, microbiologists, science teachers or STEM students will perform in the chorus – giving these trusted members of local communities a platform and creating credible local champions for AMR. There is also a version for children to put on, with free resources for them to learn catchy songs and dances about the importance of cleaning their hands.

The musical has just last night finished its run in the US, and now we hope to secure funding to bring this amazing project it to other cities around Europe and the world too.

Mobilise networks

This is now more critical than ever, because in 2024, we will see a High-Level Meeting on AMR at the UN General Assembly in New York. This will be a crucial moment for global leaders, civil society, and industry to come together and commit to actions that take us forward. Together, we can build on the 2016 Political Declaration, whilst learning lessons from climate change and from the COVID-19 pandemic. We look to all of you to mobilise your networks to contribute to the conversation leading up to 2024, and to show leadership inside and outside of UN debating chambers.

The achievements of the past few years for COVID-19 vaccines are inspiring and unparalleled – and hopefully bode for further innovations for the AMR pandemic. I also hope that more young people, including women, will be inspired to take a career path in science, diplomacy, and policymaking too, and bring their voices to the table.

Globally, we have a short window in which to build forward from COVID-19, with equity at the heart. We need to work together to realise our vision of a world free of drug-resistant infections- and I look to all of you hear today to help on this.

This is how we use evidence and creativity in the war against AMR.

Dame Sally Davies

UK's Special Envoy on Antimicrobial Resistance, a Member of the United Nations Global Leaders Group on AMR

Annual Report 2022

Impressive achievements on a shoestring

By Susan Bewley

As voted on at last year's AGM, we have now been HealthSense for just under a year.

This year HealthSense is innovating again from its 2021 hybrid AGM/Awards Ceremony to splitting these into two separate events, with an all-online AGM accessible to all members, and an in-person Awards Ceremony which is also available publicly online as a high quality recording on our YouTube site.

Basic data and activity

See table below: our membership numbers are static, with ups and downs depending on the culls of standing orders, the additions of students after the Competition and Awards, but essentially remain constant. Our wonderful Trustees continue to give their volunteer service with good attendance over the 6 formal committee meetings held by Zoom, although more meetings and work goes on in-between.

We have been very pleased to welcome our new Treasurer Saba Ul-Hasan as she has brought fresh eyes and questions to us about the whys, wherefores and processes of the charity which we have been gradually working on, in particular our Complaints, GDPR and Privacy policies.

The googlegroup has continued slowly growing with its largely respectful and interesting sharing of information and views. The HealthSense website remains an excellent source of information for subscribers, students, media and medical schools. Despite reduced activity on our Twitter account we have gained another 100 followers. We have added new videos to our youtube channel including excellent lectures from David Spiegelhalter, Christina Pagel, and Dame Sally Davies.

Newsletter

Mandy Payne, editor, has produced another tremendous four issues. Amongst the news, book reviews and special articles, highlighted features this year included learning a lot about: Covid-19 data; transparency in clinical trials; the replication crisis in science; assisted dying; the early history of HealthSense; surrogate endpoints and proper approaches to cancer screening; statins as sensible measure or a slot machine health gamble; two opposing views of the harms of interventions offered for chronic fatigue syndrome (now known as ME/CFS) in the light of new NICE guideline; quackery infiltrating the NHS; the (non) regulation of bioresonance devices and 'quantum' machines for electrosmog; doctors who practice 'integrative medicine'; and what we can learn from health care in the Indian state of Kerala.

Even the book reviews were informative essays in themselves about such tomes as "Evidence-biased antidepressant prescription: overmedicalisation, flawed research and conflicts of interest", "Patients' emancipation: towards equality" and "Malignant: how bad policy and bad evidence harm people with cancer". Luckily, 'Last Word' also directed us to read more cheerful works such as 'Factfulness' by the late Hans Rosling.

Research Fund

HealthSense is very pleased to report that the study it sponsored by Margaret McCartney was recently published in the journal BMJ Evidence Based Medicine, and this generated lively debate about matters dear to our hearts (literally). She demonstrated financial conflicts of interest among media commentators who have been positively advocating heart tests for atrial fibrillation, screening that can lead to unproven and risky treatments that are not approved by the National Screening Committee.

	2021-22	2020-21	2019-20	2018-19	2017-18
Membership					
Paid up numbers (total)	209	229	232	212	231
Social media					
Googlegroup members (total)	69	66	60	54	-
Twitter followers	1400	1292	1185	979	842
Facebook followers	307	308			
Activity					
Cumulative HW Committee threads	3450	3021	2416	1845	460
Cumulative Tweets (~500/ year)	2893	2886	2648	2169	1630
YouTube channel (views)	1141	764	-	-	-

Students

We are grateful to the Royal College of Surgeons of England who continue to support the student prize, and to the HealthSense members who contribute an enormous effort in running this unique and successful competition. The student education resource is now ready to be launched on the website which contains learning materials to help students read and critically analyse research protocols for flaws. They are also going to be invited to produce reports and videos of the results of exposing poorly-evidenced treatments. Inspired by a similar project by our sister organization the Australian group Friends of Science in Medicine, we hope to publicise our students' efforts for them under the title of "Whack-a-mole".

Consultations

Probably as he was also acting as a superb Secretary, Roger Fisken collated, wrote and made fewer submissions to consultations this year: although HealthSense did respond to the GMC's Guidelines on Good Medical Practice in July. Notably we also responded robustly to the government's call for evidence for their 10-year Cancer Plan, which we called out as being riddled with inaccuracies and *"one of the worst we have encountered in 30 years of responding to consultations"* and proceeded to explain why. It is very worrying that they are determined to roll out genetic tests that look for cancer before it happens (considering them a kind of 'holy grail'), and then do faux evaluations using surrogate endpoints to prove the 'value' of these commercially profitable activities.

So a high bar has been set for new HealthSense committee member Nathan Hodson to follow, as tracking and participating in consultations has proven to be a valuable way of commenting and contributing to policy. It is slow work, but in particular we were pleased to be quoted in the Professional Standards Authority (PSA)'s report, and to see that they introduced the 'public interest' test we and the Good Thinking Society recommended as part of its Standards for registers of health and care roles not subject to statutory regulation. This test allows the PSA to weigh up whether the evidence about the benefits of treatments covered by a register outweigh any risks.

This news was promptly followed by the Society of Homeopaths withdrawing from the accreditation scheme, so they no can no longer get its imprimatur.

Projects

Networking Some activities and conversations are difficult to pin down as direct HealthSense outputs, but behind the scenes, so many of our Award Winners keep in touch in forwarding their own activities, agendas, 'bees-in-the-bonnet' that align with our aims, and where opportunities lie to encourage one another, and to spread the word via their blogs (e.g., Edzard Ernst, Peter Wilsmhurst) and Evidence based Vloggers. An example of successful networking this year was the result of a letter we wrote to support action being taken by Friends of Science in Medicine in relation to promotion of 'The Healy' device in Australia.

Lottery funding for homeopathy HealthSense complained to the National Lottery Community Fund about their funding of pseudoscience, after Les Rose found a Sussex homeopathy group had been awarded a grant to provide homeopathy to survivors of domestic abuse and sexual violence. Sadly, this has only opened a larger can of worms as we discovered a whole lot more funding for many other so-called alternative and complementary modalities, so watch this space …

Charity Commission Les Rose continues his personal dogged work with the Charity Commission, alongside HealthSense and The Good Thinking Society, and we have had a couple of cordial meetings with them. We are hoping that our relentless reasonableness will be rewarded and that we are seeing a chink of light regarding their apparently limited powers and reluctance to address 'the public benefit' test.

The Gerson Support Group So, it is very satisfying to be able to report that Les' complaints, and our joint Briefing Document detailing his near-decade of complaining, seem finally to have come to fruition to have led to regulatory action and the closure of The Gerson Support Group. Albeit a large sum of money was transferred to another charity called "Together Against Cancer", we have had some success there also. Les made a complaint to Together Against Cancer regarding dubious nutritional advice he was given during a 'free consultation'. So far, their Chair of Trustees has been willing to engage in correspondence. The charity no longer recommends Gerson Therapy, and there have been changes to the website. We will continue to offer our help and watch this closely as it may prove to be a welcome precedent.

Cancer screening The Chair and HealthSense stalwart Michael Baum attended an international Cancer-UK workshop examining Cancer Screening Surrogate Endpoints where we were both pleased to find so many others sharing our concerns about the harms of screening.

Publications It can be hard to determine whether it's better to have quick wins in Twitter spats or go for the slower slog of formal publications that are hidden from view behind paywalls (e.g., Bewley S & Ernst E. Positive spin in acupuncture systematic review requires correction. BJOG 2022;129(7):1168-1169, or Bewley S. HPV vaccination and cervical cancer screening. Lancet 2022;399(10339):1939, on stopping screening in light of the success of vaccination). This year HealthSense got mentions in mainstream media commenting on aromatherapy in Nottingham's maternity services, and in Private Eye where Patricia Murray continues to uncover egregious practices involving stem cells. We are still supporting Peter Wilmshurst in his demands for both UCL and the Lancet to retract a 2008 paper regarding regenerated trachea from the disgraced surgeon, Paolo Macchiarini.

Personal comment

It might seem a small achievement, but I was cheered that the Network Health Digest – a magazine for nutritionists and dietitians – chose HealthSense as its featured charity (out of a total of 412,396 charities!). I

baulk every year about writing the Annual Report (which is why it is only tabled just before or at the AGM itself) as I can feel so ineffective. Why have we not yet brought down the edifice of pseudoscience, quackery, fraud and institutionalised international corruption? Maybe we are up against huge, powerful forces? Yet, when I look at our achievements, on a shoestring, I realise that we do stand firm with our values and scientific methods, continuing to have influence and disseminating our ideas and ideals, against a strong anti-rational and disturbing undercurrent of events.

Susan Bewley

Chair of Trustees of HealthSense UK

Students

London medical schools scoop the prizes this year

"London medical schools must be doing something right," said HealthSense president Nick Ross, noting that the winners of the 2022 HealthSense Student Prize had all been trained at either Kings College or University College. He was congratulating them at the 2022 HealthSense Awards ceremony, held at the Victory Services Club, London, on Wednesday 30 November.

First prize of £500 in the Medical Students' category went to Norfolk-born Lydia Shackshaft who recently graduated from Kings College London Medical School and is now an Academic Foundation Doctor in Bristol.

"It was during my intercalated BSc that I realised how poorly my medical degree was equipping me with research and critical appraisal skills; skills that would be important to enable me to practice truly evidence-based medicine. When I was introduced to HealthSense by my GP tutor, James May, I thought the student prize would be an opportunity to test my critical appraisal skills whilst simultaneously improving my knowledge of clinical trial protocols in preparation for my research job."

Lydia hopes eventually to combine clinical work as a psychiatrist with a career in research. A recent elective placement awakened in her an interest in homeless healthcare which she hopes to include in her career portfolio.

"Evidence-based medicine can be a buzzword but we are not really taught how to use evidence. Medical schools say there is already so much in the medical curriculum, but this does have to change because medicine is constantly changing and we have to understand how to respond to new evidence and change our practice."

Runner-up Honey Panchal from Hemel Hempstead has completed her first two years of medicine at University College London Medical School, and is spending this academic year intercalating an iBSc in neuroscience. "I wish to pursue surgery in my future career and conduct research within the fields of clinical neuroscience and neurosurgery. The competition gave me a real appreciation for how research should be carried out."

It was great to welcome Londoner Jack Coumbe to awards night for a second time, as he was also a runner-up in our 2021 competition. He is currently in the final year of his Kings College medical degree and applying for foundation programmes in London. Jack credits the HealthSense Student Prize for his motivation to continue in clinical trials and academia. "I'm already interested in research and these skills are important for research. The competition is a great opportunity to put these skills into practice."

Both runners-up received a cheque for £100. This year we received no entries of high enough standard in the category of Nursing, Midwifery and Professions Allied to Medicine.

The HealthSense Student Prize competition aims to test students' research skills by inviting them to evaluate four hypothetical research protocols and rank them in order of quality. It runs annually through the Autumn term, with deadline at the end of April. Entries are invited from two categories: Medical and Dental Students; and Students of Nursing, Midwifery and Professions Allied to Medicine.

In each group there is a first prize of £500 and up to five runner-up prizes of £100. A full list of past winners can be found on our Student Prize page. We are extremely grateful once again to the Royal College of Surgeons of England for their generous sponsorship of this year's competition.

All full-time and recently-qualified students in these categories, whether entering the competition or not, can apply for free Student Membership of HealthSense.

Psychology

The Hans Eysenck Scandal

by David Pilgrim

Hans Eysenck was a controversial public intellectual. He was the best-known British psychologist of the time, the world's most quoted psychologist and a popular figure with the media. He was also one of the first to attack psychoanalysis for being unscientific, not least with his famous quote: that Freud was "a genius, not of science, but of propaganda, not of rigorous proof, but of persuasion, not of the design of experiments, but of literary art."

Less well known is the story of Eysenck's own alarming biases and his apparent scientific fraud. Given his role in exposing pseudoscience perpetrated by others, this is an extraordinary and important story seldom told.

Eysenck came from Germany before the Second World War and soon conformed to the scientific norms of psychology in his host culture of London University. By 1950 he was head of Psychology at the Institute of Psychiatry. The latter became part of King's College

London (KCL) in 1997, which was also the year of Eysenck's death.

He courted controversy in the post-war period about a range of topics, including race and IQ, and his empirical case for defending aversion therapy for homosexuality. Here I report briefly on a posthumous controversy: his research on the relationship between smoking and pathology. A much longer account of the Eysenck scandal, and its history, is in press.(1)

In 2019, KCL investigated Eysenck's work about smoking and health. The look back exercise was instigated by a complaint from the editor of the *Journal of Health Psychology*, David Marks, in the wake of the concerns expressed by the psychiatrist Anthony Pelosi about Eysenck's unreliable studies.(2) In 1995 Pelosi had requested that both the British Psychological Society (BPS) and Eysenck's employers, the Institute of Psychiatry, should investigate the matter. However, at that time both declined his request. Eventually KCL did take action and recommended to journals the retraction of many of Eysenck's articles.

Implausibility

Eysenck had argued that a direct link between smoking and morbidity was unproven (3,4). Instead, the argument went, the genetic proneness to both cancer and addictive habits intersected with any possible pathogenic effects of tobacco. Pelosi and others drew attention to the implausibility of this position from the data reported.(5) The case against Eysenck was clear. For example, he claimed that cancer-prone personalities risked cancer at 120 times that of non-cancer-prone personalities. For heart disease it was a 25 times increased risk. He also claimed that cognitive-behavioural therapy (CBT) could reduce the death rate of disease prone personalities over a 13 year period from 80% to 32%. This was out with any other claim about CBT being able to modify physical health risk in patients.

To date eight journals have retracted over twenty articles. Four have looked through their archives and attached expressions of concern to a total of sixty-five co-authored papers by Eysenck, on topics other than fatal diseases.

Why now and not in the 1990s?

Eysenck had taken sponsorship money from the tobacco industry, which he made quite explicit in his book length account of smoking and health.(6) This was published provocatively in the immediate wake of the appearance of the official epidemiological data and the causal link proposed between smoking and disease, from the Royal College of Physicians in 1962.

Eysenck was a bullish professional leader and both KCL and the BPS may have deferred their critical scrutiny because of his potential personal reaction when he was alive. However, even after his death, they were both still very slow to react. One reason was the general dilemma of balancing scientific integrity with considerations about reputational damage.(7) At the turn of this century, Eysenck's high status public reputation was yoked with British psychology, as a discipline, and with the standing of the Psychology Department at the Institute of Psychiatry.

Subsequently, the emerging wider 'replication crisis' in psychology emboldened critical scrutiny of orthodoxies, with technological changes being important. Now, we have platforms, such as *RetractionWatch* and *PubPeer*, which have altered our sensitivity about publication probity and provide a process of retrospective scrutiny. Together all of these factors have contributed to a case for the retraction of so much of Eysenck's work, which was to be taken seriously eventually, rather than evaded, by managers at KCL and the BPS. An overarching question for historians of human science is why a full and proper academic appraisal of Eysenck's work has taken so long. Above I offered some interpretive suggestions about the indolence of KCL and the BPS. They may well have juggled academic integrity and reputational damage limitation.

Scrutiny

Today Eysenck's work, within the eugenic tradition of British psychology more generally at London University (which included Francis Galton, Karl Pearson, Charles Spearman and Cyril Burt), has come under the recent critical scrutiny of student identity politics activists. In line with that new ideological context, the BPS have in recent years dropped the prize of the Spearman Medal for academic excellence and they no longer host the annual Hans Eysenck Memorial Lecture. Another reflection of that *zeitgeist* has been that University College London have removed the names of Galton and Pearson from their rooms and buildings.

The legitimate, evidence-based, request in 1995 by Pelosi bore no fruit at all. Today the conceded case for a critical look back from KCL and, very recently the BPS, may be explained by technological changes, and responses from managers of public bodies to the expressed needs of paying consumers. These managers are concerned about being seen to be on the 'right side of history', in response to recent norms set by identity politics activists in their ranks, inflected by sensitivities about the income generated by fees.

These activists may well have now succeeded, where Pelosi had failed twenty five years previously. The politics of retraction then reflect ideological and commercial factors, which lie beyond the rational and evidential case being made by scientific critics.

David Pilgrim

Visiting Professor of Clinical Psychology, University of Southampton and Honorary Professor of Health & Social Policy, University of Liverpool

References

1. Pilgrim D. Verdicts on Hans Eysenck and the fluxing context of British psychology *History of the Human Sciences* 2022 (in press)
2. Marks DF. The Hans Eysenck affair: Time to correct the scientific record. *Journal of Health Psychology* 2019;24(4):409-20

3. Eysenck HJ. Personality, stress and cancer: prediction and prophylaxis *British Journal of Medical Psychology* 1988;61:57-75
4. Eysenck HJ. Personality, stress, and disease: an interactionist perspective. *Psychological Inquiry*1991;2:221-232
5. Pelosi AJ. Personality and fatal diseases: revisiting a scientific scandal. *Journal of Health Psychology* 2019;24(4):421-439
6. Eysenck HJ. *Smoking, Health and Personality* 1965 New Brunswick: Transaction Press
7. Craig R, Pelosi A and Tourish D. Research misconduct complaints and institutional logics: the case of Hans Eysenck and the British Psychological Society. *Journal of Health Psychology* 2021; 26(2):296-311

International view

The 'Münster Circle' - how German experts are fighting pseudoscience

By Edzard Ernst

On 11 October a Memorandum on Integrative Medicine was published by a group of German experts of which I am a member, who are increasingly concerned about the growing adoption of so-called "Integrative Medicine" into mainstream medical treatment. Our new declaration is the latest move in a campaign aimed at the German media, universities and policymakers. It is raising awareness of the harms of pseudoscience in health care.

The 'Münsteraner Kreis' or 'Münster Circle' is an informal association of experts who take a critical look at alternative medicine and related issues. It was founded in 2016 and is the result of an initiative by Dr Bettina Schöne-Seifert, Professor of Medical Ethics at the University of Münster. In her words: "We wanted to explore how a health care system should deal responsibly and fairly with the clash between dangerous pseudoscience and self-determination. To put it bluntly, we no longer wanted to tolerate the current insanity."

We are from many different fields, including medicine, dentistry, philosophy, law, ethics, history of medicine, and journalism. Since 2016, we have published several documents (all in German) which have been highly influential in stimulating discussions on the respective subjects:

- March 2022: Münster Memorandum Science-Oriented Medicine (1) addresses the claim of modern academic medicine to be able to explain and empirically prove the prospects of success of its treatment measures according to the respective state of scientific knowledge. The purpose of this memorandum is to set out the aims and basic concepts of science-oriented medicine in the light of the Covid 19 pandemic.
- April 2021: Homeopathy – 10 Language Confusions (2) draws attention to phrases that have become widespread in common usage and are even used in media articles critical of homeopathy, but which originate from the advertising and confusing language of homeopathy. We would like to offer alternatives to these terms.
- March 2018: Münster Memorandum Homeopathy (3) calls for the abolition of the additional title of homeopathy. Medical associations award this additional designation to physicians who provide proof of appropriate advanced training. This gives the esoteric healing theory of homeopathy a veneer of respectability that it is not entitled to in a scientifically oriented health care system.
- August 2017: Münster Memorandum Heilpraktiker (4) suggests an abolition or fundamental reform of the 'Heilpraktiker', the non-medically trained alternative practitioner (that is unique to Germany).

Our latest venture was the recently published 'Memorandum Integrative Medicine' (5) of which I had the pleasure of acting as lead author. Here is a summary in English:

The merging of alternative medicine and conventional medicine has been increasingly referred to as Integrative (or Integrated) Medicine (IM) since the 1990s and has largely replaced other terms in this field. Today, IM is represented at all levels.

Integrated Medicine is often characterised as the 'best of both worlds'. However, there is no generally accepted definition of IM. Common descriptions of IM emphasise:

- the combination of conventional and complementary methods
- the holistic understanding of medicine
- the great importance of the doctor-patient relationship
- the hope for optimal therapeutic success
- the focus on the patient
- the high value of experiential knowledge

On closer inspection, descriptions of IM show inconsistencies. For example, keeping medicine in the hands of doctors is stressed, but it is also emphasised that all relevant professions would be involved. Scientific evidence is emphasised, but at the same time it is asserted that IM itself includes homeopathy as well as other unsubstantiated treatments and is only 'guided' by evidence, i.e., not really evidence-based. It is claimed that IM is to be understood as 'complementary to science-based medicine'; however, this implies that IM itself is not science-based.

The 'best of both worlds' thesis impresses many. But what is meant here by 'best'? The term is not interpreted in nearly the same way as in conventional medicine. Many claims of IM are elementary components of all good medicine and thus cannot be counted among the characterising features of IM. Finally, it is hard to ignore the fact that the supporters of IM use it as a pretext to introduce unproven or disproven modalities into conventional medicine. Contrary to promises, IM has no discernible potential to improve medicine;

rather, it creates confusion and entails considerable dangers. This cannot be in the interest of patients.

Against this background, it must be demanded that IM is critically scrutinised at all levels. In particular, the Münster Circle appeals:

- to universities and medical faculties to promote a critical examination of IM and its misleading promises, not to continue to stand idly by – on the contrary they should examine IM initiatives more carefully and with more courage to demarcate them;
- to journalists, media, and publishers to confront IM and its supposed attractiveness with informed scepticism, to name direct and indirect dangers, and thus to contribute to responsible risk communication; and
- to decision-makers in medicine and health care to consistently counteract the dangers from infiltrating unproven or disproven alternative procedures associated with IM; and not to promote ineffective and dangerous parallel structures in science-oriented medicine and health care.

Edzard Ernst

Emeritus Professor, University of Exeter

References

1. Schöne-Seifert B et al. Ein statement der interdisziplinären expertengruppe "Münsteraner Kreis" zur wissenschaftsorientierten medizin im spiegel der covid-19-pandemie (A statement by the interdisciplinary expert group "Münsteraner Kreis" on science-oriented medicine in the context of the covid-19 pandemic). Muensteraner-kreis.de, March 2022
2. Homöopathie – 10 Sprachverwirrungen (Homeopathy – 10 language confusions). Muensteraner-kreis.de
3. Anlauf M et al. Münster Memorandum Homeopathy. Muensteraner-kreis.de, February 2018
4. Münsteraner Memorandum Heilpraktiker. Muensteraner-kreis.de
5. Scholz OR. Neues memorandum zur anthroposophischen medizin (New memorandum on anthroposophic medicine). Muensteraner-kreis.de, November 2022

Book review

"Sick Money: The Truth About the Global Pharmaceutical Industry" by Billy Kenber

Published in October 2021 by Canongate Books. RRP £9.72 paperback, £6.99 ebook

By Till Bruckner

"You don't need to discover drugs to get rich off them any more," Billy Kenber writes in the introduction of *Sick Money: The Truth About The Global Pharmaceutical Industry*.

Charting the evolution of the industry over half a century, the book documents how structural changes in the marketplace have fuelled exponential increases in the cost of medicines while delivering disappointingly little in the way of clinically relevant innovation.

As Kenber tells the story, up to the early 1980s, the pharmaceutical industry was underpinned by an unspoken "social contract". Society granted pharma companies the right to set prices for new drugs to recoup their R&D costs. In exchange, the small cabal of old white men with medical backgrounds who ran the industry upheld their side of the bargain.

They essentially acted like the gentlemen and good citizens they were, operating on the principle that if you brought a useful compound to market, the profits would look after themselves. Once the initial patents expired, medicines became widely available at low cost, benefiting humankind in perpetuity.

That social contract began to fray during the 1980s as the gospel of 'shareholder value' redefined the purpose of corporations and the expectations of their shareholders. In parallel, there was a culture shift within pharma companies themselves, as profit-focused MBAs gradually displaced scientists at the helm.

A financialised industry

Throw venture capitalists and hedge funds into the mix, add a U.S. healthcare system with completely misaligned cost incentives, and fast forward to the "financialised" industry of the 2020s.

By now, Kenber argues, the entire pharma business model has become reliant on the unsustainable assumption that every new drug will be priced significantly higher than its predecessor, and that society will foot the bill.

Meanwhile, R&D efforts have become narrowly focused on areas where the sky-high returns on investment demanded by shareholders can still be realised, notably on treatments for cancer and rare diseases.

If the narrative above sounds simplistic, Kenber's book is anything but. It is exhaustively researched and enriched by over a hundred interviews, including with current and former pharma executives, and spans the United States, United Kingdom and Canada.

The depth of insight and analysis is breath-taking as the author covers everything from generics market failures to AIDS activism, patent thickets, biosimilar market entry barriers, insulin price rackets, and the nuances of health technology assessment, with a fascinating discussion of the sector's concerns about declining returns on R&D investment thrown in for good measure. The referencing is impeccable throughout.

While Kenber also tells the stories of patients unable to access life-saving drugs, and of the occasional rogue industry player, he thankfully steers clear of excessive moralising. Instead, we are called to witness a Greek tragedy in which "financialised" companies and their executives are inexorably pushed into actions and outcomes that benefit shareholders at the expense of patients, taxpayers, and public health.

How can we fix the system?

How can we get the system back on track? Kenber's prescriptions reflect the complexities of the science and the marketplace. He offers no magic bullets.

Instead, he proposes multiple, interlocking reforms including changes to patent law, the setup of public generics manufacturers, caps on price increases for

drugs already on the market, investor activism, measures to recoup public R&D investments, head-to-head clinical trials, strong health technology assessment, and 'Netflix' payment models.

Intriguingly, he also suggests re-examining whether some public R&D investments are worth making in the first place.

Most new drugs either provide marginal benefits to a wide range of patients (cancer drugs) or provide significant benefits to only a tiny number of patients (many rare disease treatments). Considering the opportunity costs of such research, might this money not be invested better elsewhere, he asks?

A minor weakness of the book is that Kenber arguably dismisses two possible fixes to the system too quickly. The first fix, beloved by many advocacy groups, is *coupling drug prices to companies' R&D expenditures*. While I'm personally also sceptical of that approach, for the same reasons that Kenber cites, many smart people think otherwise, and their arguments could have been given more consideration.

Kenber also dismisses a second, more radical, option out of hand: *moving drug development from the private to the public sector*. While his counterarguments are valid, a deeper dive would have been welcome here – if only because market forces seem spectacularly ill-equipped to operate in contexts where the seller has a monopoly, and the potential purchasers will die unless they buy the product. Getting this kind of 'marketplace' to work effectively requires so much government intervention that by the end of the process, there is arguably next to no 'market' left anyway.

Read this book

In sum, this is one of the most impressive books that I have ever read, full stop.

My main criticism is that it is only 350 pages long; Kenber's excellent writing could easily have carried me through a thousand more. Executive summary: Read this book.

Till Bruckner

Founder, TranspariMED

Like all TranspariMED outputs, this book review is published under a Creative Commons license (CC-BY 4.0). Please feel free to re-post it elsewhere.

Published by HealthSense

www.healthsense-uk.org

President: Nick Ross
Chair: Roger Fisken
Vice-Chair: Leeza Osipenko
Secretary: Philippa Pigache
Treasurer: Saba Ul-Hasan
Newsletter Editor: Mandy Payne

Committee: Susan Bewley, Andrew Fulton, Alan Henness, John Illman, Keith Isaacson, James May, Tom Moberly, Nathan Hodson and Les Rose. Matthew Choy, Robert Grant, Pavithran Maniam and Sylvester Odame-Amoabeng are Student Representatives. Jolene Slothouber Galbreath is Trainee Doctor Representative.

Press enquiries please use contact form at https://www.healthsense-uk.org/media or e-mail media@healthsense-uk.org

Letters and articles for publication are welcomed and should be sent to the editor at: newsletter@healthsense-uk.org For our requirements please see https://www.healthsense-uk.org/publications/newsletter/information-for-authors.html

Opinions expressed in letters and articles published in the HealthSense Newsletter belong to the authors and do not necessarily reflect the views of HealthSense. Authors are responsible for the factual accuracy of their own articles; the editor reserves the right to amend text if necessary but will, where possible, consult the author to ensure accuracy is maintained.

Unless otherwise indicated, all web addresses referenced in this issue were accessed on or after 5 January 2023.

HealthSense is the new name for HealthWatch, the charity that has been promoting science and integrity in healthcare since 1991

We stand for:

- The assessment and testing of all medical and nutritional treatments, products and procedures
- Consumer protection in regard to all forms of health care
- The highest standards of education and evidence-based health care by practitioners
- Better understanding by the public and the media of the importance of application of evidence from robust clinical trials

We are against:

- Misleading advertising of health products
- The sale of unproven remedies to the vulnerable and desperate
- Unethical marketing by pharmaceutical companies
- Misconduct in clinical trials
- Media misinformation on health and nutrition
- Government promotion of health and screening programmes unsupported by evidence

Our activities include public debates, symposia, awards, a student competition, and this quarterly newsletter. HealthSense welcomes membership enquiries from those who share its aims. Join at https://www.healthsense-uk.org/join