comment

> Giving small gifts is part of our social culture. And receiving presents well is a form of gratitude in itself, an acknowledgment of the luck we have in doing this work

NO HOLDS BARRED Margaret McCartney

Christmas presents

With Christmas come the presents, but since graduation they've caused me disquiet. They arrived, carefully and thoughtfully wrapped, some with notes and cards, some with just my name. In accepting gifts from patients, I was disturbed.

I thought, firstly, that they were being given under false pretences. I wasn't doing any more than the average doctor, maybe less: I'd made mistakes; had missed things that the "retrospectroscope" made obvious; and had often been less sensitive or cheerful than I should have been. I didn't deserve them, clearly.

Secondly, it wasn't right to give me chocolates or alcohol when money was tight. This wasn't a fair use of funds.

And, lastly, did accepting a gift mean that I'd entered some kind of Faustian pact? Was I going to be asked to do things that I shouldn't—for example, to make an unnecessary referral?

My medical defence union makes clear that doctors "should carefully consider the size of any gift, the patient's possible motive and any possible impact on their professional judgement."[1] Even if the gifts were boxes of chocolates or homemade biscuits rather than cars, houses, or cheques, I was only right to be suspicious. So I wrote polite thank you notes, feeling uneasy, afraid to feel gratitude.

This has all changed. A few years ago I was ill. When I was better, I went to buy presents for the people who had looked after me. The process of choosing, wrapping, and giving small presents felt like a natural and human response. I was grateful, appreciative, and thankful.

My care had been kind and generous, populated by people who gave of themselves. By giving a gift I was responding as a person to a person, not just as a patient to a professional. I felt liberated in sending thank you cards, at expressing gladness. It made me happy to send small presents to say thank you.

I still don't think that I'm especially deserving of presents of chocolate or alcohol at Christmas. I wouldn't accept large, expensive, or monetary presents. But giving small gifts is part of our social culture. And receiving presents well is a form of gratitude in itself, an acknowledgment of the luck we have in doing this work, of being a little part of other people's lives.

Sure, we should feel suspicion about showy gifts or ones with romantic undertones. But the real point of presents is that we, patients and doctors, can together try to find the best way forward and make room for each other's human foibles.

Margaret McCartney is a general practitioner, Glasgow
margaret@margaretmccartney.com
Follow Margaret on Twitter, @mgtmccartney
Cite this as: *BMJ* 2015;351:h6655

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ANALYSIS

What your digital footprint reveals about your health

Timothy Libert and colleagues argue that we need tighter restrictions on how advertisers use data from web browsing, while looking at the potential of such data to improve health

In January 2014, the Privacy Commission of Canada declared that Google had violated Canadian privacy law when it used information about people's online activities to target them with health related advertisements.[1] Someone who had searched online for medical devices to treat sleep apnoea found himself followed by advertisements for such devices as he visited unrelated websites. His search had resulted in a browser cookie that triggered ads for sleep apnoea devices when he visited websites that used Google's advertising services. Google acknowledged that some of the advertisers using its service did not comply with its policy against ads relating to sensitive issues such as race, religion, sexual orientation, or health.[1]

WHAT YOU NEED TO KNOW

- Digital footprints from activities like internet browsing inadvertently reveal a great deal about our health
- Despite strict regulation of clinical information, health information obtained through digital activities is now widely available to marketers with little protection
- Such information also has potential to advance individual and population health
- We need to tighten access to information used for marketing while discussing with patients how these methods could be borrowed by healthcare and public health organisations

GLOSSARY OF TERMS

Browser cookie—A small text file saved to users' computers that can be used to identify and correlate their visits among many websites. Companies using cookies can track users until the user deletes the cookie

Browser fingerprint—A new method that uses the characteristics of computers (eg, operating system, screen size, installed fonts) to identify and correlate a person's visits across many websites. Unlike cookies, browser fingerprints cannot easily be deleted

Behavioural advertising—The process by which online advertisers and data brokers use information about online behaviour (eg, the history of which websites have been visited) to target specific advertisements and deals at people with a certain behavioural profile

HTTP request—Hyper-Text Transfer Protocol is the type of network request by which users download websites. These requests may be made to a "first party," which is the address listed in a browser's address bar. In addition, "third party requests" may be made in the background to advertisers and data brokers outside the user's view; often this is called the hidden web

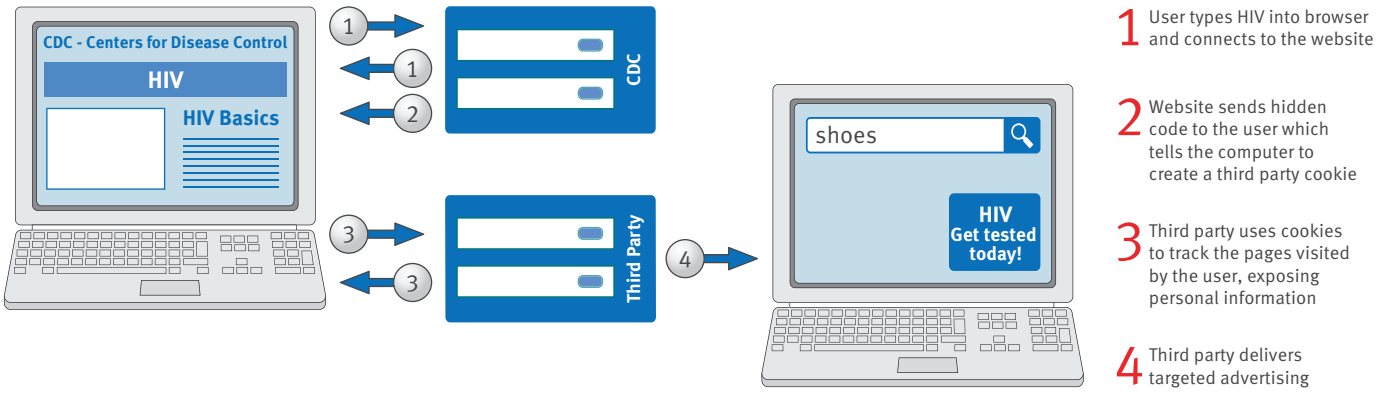
How "remarketing" strategies work

When we seek health information online, the visited websites often include a code that initiates network connections (known as HTTP requests) to third parties such as online advertisers. It is these HTTP requests that effectively share browsing histories (figure). Records of visits to pages for sleep apnoea, depression, or addiction treatment can be resold to organisations wanting to know who is interested in these topics. Such information may be as sensitive as that in electronic health records, and yet little legal oversight regulates how it is collected, how long it is kept, and how it is used.

Scale of information leakage

A recent study using 1986 health related search terms showed that 91% of more than 80 000 commonly visited web pages initiated such requests, most of which transmit user information to third parties, largely to promote marketing. Commercial websites require advertising revenue to operate; it is not surprising, therefore, that they initiate third party requests. By contrast, non-profit, government, and education websites might have less need to rely on advertising revenue. Nevertheless, 92% of .org, 86% of .gov, and 76% of .edu pages initiated third party requests.[2] The problem appears global. In the United Kingdom, the NHS homepage generates third party requests to seven domains owned by American companies, including NetIQ, Amazon, and Google. While the way this information is used is often a trade secret, these results show substantial leakage.

Most web browsing reveals little about any given person and is largely benign. However, once aggregated, patterns of behaviour can be attributed to specific people. For example, Facebook requires real names and also receives HTTP requests from 31% of the sites analysed. This potentially allows Facebook to pair real names with real health conditions. In addition, data brokers who sell identified user data, such as Experian and Acxiom, track views on health related pages.[4] Companies do not clearly disclose how they use the data, but there are few limits on what they can do. By contrast, there are strict controls to protect personal health information generated during clinical



How online searching leads to targeted web advertising

encounters. It is as if the front door is barricaded and the back door is wide open.

Potential for harm

Web browsing may reveal as much or more about patients' health as clinical records. Web browsing by someone with diabetes, for example, could show not only that they have diabetes but actions they are taking or considering to control their diabetes. Marketers mining health information from web browsing patterns can create harm when, for example, a browser on someone's computer reveals embarrassing health information through advertisements that appear when that computer is shared or used in a public setting such as a workplace.

Constructive use

In a recent study, people were more tolerant of research uses of personal health information without consent than they were of commercial marketing uses of the same information with consent.[6] The concern that people don't want to share their health related information is further challenged by the uptake of wireless health devices aimed at promoting fitness, weight loss, medication adherence, or management of chronic disease.[7] Patients increasingly use this kind of information sharing to provide self motivation or to engage others, including friends and physicians, in their quest for better health.

Information from browsing histories has the potential for benefit by helping to identify patients with treatable conditions. Current healthcare use of browsing information operates on a population level—examining regional symptoms to forecast influenza trends, for example. But individualised browsing histories might also be useful. For people with undiagnosed depression, for example, web browsing patterns may reveal the diagnosis even when they, or their doctors, are unaware. By electing to share appropriately protected web browsing data people could obtain valuable insights about strategies to achieve health goals. The same data used in aggregate might inform societal research goals.

Moving forward

What is needed now is a tightening of access to information used for marketing while simultaneously re-examining how patients want their digital information used for other purposes. Organisations like the US Centers for Disease Control and Prevention (CDC) should examine the coding within their websites to ensure that sharing of browsing information is consistent with the goals and expectations of the organisation and its users. Regulators should think past their focus on information source in designing protections of health related information, since that information is no longer produced only during clinical encounters. In the European Union, the EU Data Protection Directive applies to health information created and accessed outside of healthcare settings. However, implementation and enforcement of the directive have been inconsistent.

Web browsing by someone with diabetes could show not only that they have diabetes but actions they are taking or considering to control their diabetes

Perhaps most importantly, health organisations should engage the public in discussions about how they might use some of the same clever methods of marketers to understand the health needs of patients and the public and respond to them. For instance, by observing and analysing web browsing patterns, a healthcare organisation might be able to identify patients who are ready and motivated to quit smoking and target interventions at them.

What could make these new strategies work for individual clinical care is offering patients clear and easy opportunities to control the information they elect to share. Societal research purposes could be supported without such opt-in provisions, so long as the information was securely protected and its use monitored. These processes deserve discussion as much for the opportunities they might provide as for the protections they will require. But even as we decry the methods used by marketers, health and healthcare organisations might learn from them, adapting the same tools for social purpose.

Timothy Libert is PhD candidate, Annenberg School for Communication, University of Pennsylvania, Philadelphia, PA, USA

David Grande is assistant professor of medicine, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA

David A Asch is professor of medicine, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA; Wharton School, University of Pennsylvania; and Philadelphia VA Medical Center, Philadelphia, PA 19104, USA asch@wharton.upenn.edu

Cite this as: *BMJ* 2015;351:h5974

PERSONAL VIEW Layla Jader

Epigenetics: children are the guardians of our genome

The environment that our parents and grandparents grew up in influences our health

Evidence has been mounting about the importance of interactions between people's genetics and their environment, especially in pregnancy and childhood. Knowledge about how wider environmental factors can turn genes on and off—the new science of environmental epigenomics—is gaining wider coverage and influence.

Research has shown that genes and the wider environment are inextricably intertwined, each affecting the other. These gene markers can be passed on to future generations in mammals, and they can also be reversed. This gives health promotion a new, added emphasis.

Increasing evidence shows that early life exposures that parents and grandparents had during pregnancy and pre-puberty can contribute biologically to developmental variation in their offspring.

Some scientists believe that this effect could span more than three generations in humans.[1] Research on mammals has demonstrated responses in further, non-exposed generations.[2] Evidence has also shown how both a lack and an oversupply of food, paternal smoking at pre-puberty, and smoking in pregnancy can affect grandchildren's morbidity and mortality.[3-5]

It is clearer than ever that, to ensure better future health for our children, grandchildren, and subsequent generations, we should give children our priority today.

Children's health influences educational attainment and education influences future health outcomes

Effective health improvement initiatives in pregnancy, such as promoting smoking cessation, abstinence from alcohol, and a healthy diet, will improve the health not only of pregnant women and their babies but also that of their babies' babies. And such initiatives from birth, through to nursery and school age, are the most important and cost effective way to prevent diseases in subsequent generations.

We know that children's health directly influences their educational attainment and that education directly influences future health outcomes.[6] Therefore, a strategy of sustained actions on both their health and education, whereby one strengthens the other, is the

THEBMJ.COM BLOG Jessamy Bagenal

Junior doctors—what are we fighting for?

Huge numbers of junior doctors have joined the BMA since June when Jeremy Hunt launched his new tactics on NHS staff. His inflammatory and insulting statements, implying for example that doctors have turned medicine "into a Monday to Friday profession," have enraged doctors.

Although the strike action has been suspended and a previously united front has fractured, the ground has shifted, perhaps forever. So even if, in some parallel universe, the government agreed with all the BMA's terms for a new contract, would it matter?

Junior doctors have become more politically aware, realising at last the importance of changes made in the Health and Social Care Act 2012. A two billion pound deficit, three years of expensive reforms, and overall reductions in mean earnings have resulted in such dissatisfaction and mistrust of government that NHS staff are united as never before. At the weekend the nurse I worked with in A&E wore an "I support junior doctors" badge. NHS staff are expressing a sense of community. This was common to previous generations but fragmented with the introduction of shift patterns and increasing financial pressures. NHS staff have now joined in what can only be described as a fight; taking up arms through social media and

Staff no longer trust the government to run the NHS

recognising the power of public opinion.

But the reasons are unclear. When 20 000 people took to the streets in London in protest many of the signs read "Save our NHS" "Protect our Doctors: Protect our NHS" "We already work seven days a week." This has for many people become more about the future of the NHS rather than terms and conditions in a contract. The BMA has stayed "on message" but even their well organised and branded paraphernalia "Junior Doctors' contract, It's everyone's fight" seems to

best way forward. Children must be prioritised, and staff working in health or education should receive training on the generational implications of good and bad lifestyles and the wider environment.

Forming government policy

This argument is so crucial for sustaining future generations that I advocate extending the powers of the United Nations Convention on the Rights of the Child so that it is the basis of all government policy for children and young people. Its core aims should be extended to include a statement of intent to make children's health, education, and wellbeing, from conception until leaving school, the first priority for public policy and to enshrine this in law.

Only a strategy of sustained, integrated action on the health and education of children will have the best chance of reducing health inequalities, improving social mobility, reducing the impact of child poverty, and increasing economic prosperity. New findings in epigenetics and transgenerational evidence demand urgency as we realise the consequences of inaction on future generations.

Layla Jader is consultant in public health genomics, Wales, Temple of Peace and Health, Cathays Park, Cardiff CF10 3AP
Layla.Jader@wales.nhs.uk

Cite this as: *BMJ* 2015;351:h6265

suggest we are fighting for more than a contract.

Of course the changes to the junior doctor contract started because the DDRB was commissioned to come up with a cost neutral pay envelope that would allow seven day working.

The government is so convinced of the need for a routine seven day NHS, a notion of such expense and unknown benefit, that staff no longer trust the government to run the NHS.

Although times have been hard for NHS staff, their loyalty to the concept of free healthcare and the NHS as an institution is deep rooted and emotional. For many who voted "yes" to industrial action it was because they felt there was nothing else to do, a last resort.

The importance of the result of contract negotiations must not be underestimated. It will have ripple effects for all NHS staff, for the future of recruitment, research, and NHS staff professionalism. But now we've drawn our only card, what will happen when a resolution is reached? With a demoralised workforce and a crisis ridden NHS, will staff continue to be united? Will a movement to protect a failing NHS continue? Or will the business of people's everyday jobs, lack of immediate threat to our livelihoods, and knocks from shrewd political moves make us go back under the covers? I do hope not.

Jessamy Bagenal is a general surgical registrar in North West Thames. She is based at *The BMJ* as an editorial registrar

ACUTE PERSPECTIVE

David Oliver

I've nothing against golf

As a kid in Manchester I'd hack my way around municipal short courses in public parks with rented clubs. And I enjoy watching the Open and the Masters on TV. But that's the closest I've got to golf club membership.

Non-medical media watchers in the United Kingdom might have me pegged as "below par" here. Surely all doctors have a membership card in our wallet and kit in the car, ready to tee off at a moment's notice with a group of well heeled colleagues. And what better time, surely, than when at the public's expense—perhaps when we're on call or meant to be in clinic on a Friday afternoon? Shameful.

A recent *Times* feature on emergency readmissions to hospital had Patient Concern's Roger Goss opining that these were due to doctors working "on the golf course with their mobile phones."[1] Cristina Odone said in the *Telegraph*, "Doctors should get off the golf course and onto the wards,"[2] and the vitriolic online responses evinced equally uninformed resentment.

Surely all doctors have a membership card in our wallet and kit in the car, ready to tee off at a moment's notice

Golf club membership in England is 83% male and only 3% non-white.[3] It's seen as shorthand for wealth and exclusivity, conservative with a small and a large C. Also, it's often said that doctors are "naturally conservative."

Yet half of UK doctors are women and that only half are white.[5] And openly anti-Conservative campaigns against the growing marketisation of the NHS, including those from the BMA itself, indicate that many doctors are hardly of the political right.[6]

When I'm in the hospital at a weekend I work pretty much flat out for 12 hours. There'd be some slow play if I tried to see 30-40 new acute patients from a golf course. It's the same for most doctors, junior or senior, in many acute specialties. But this didn't stop the health secretary, Jeremy Hunt, saying that we had a "nine to five weekday culture" and had "lost a sense of vocation."[7]

I've recently asked more than 100 doctor colleagues whether they play golf, and fewer than 1 in 20 said yes. Popular debates about doctors' terms and conditions should be based on the realities of the modern medical workforce—and not on fantasy.

David Oliver is consultant in geriatrics and acute general medicine, Berkshire
davidoliver372@googlemail.com
Follow David on Twitter, @mancunianmedic

Cite this as: *BMJ* 2015;351:h5796

OBITUARIES

Robert Marshall Adam

Consultant obstetrician and gynaecologist (b 1926; q Christ's College, Cambridge/St Bartholomew's Hospital, London, 1954; FRCOG), d 15 February 2015.
Robert Marshall Adam ("Rob") was appointed to a consultant post at Musgrove Park Hospital, Taunton, in 1965. His sound clinical practice and enthusiastic teaching skills were well recognised. He retired in 1991, but his enthusiasm for work was such that he spent the next five years working in Australia. Outside work he spent holidays in Cornwall and Majorca. Rob leaves his wife, Val; four sons; and nine grandchildren.

John A Richardson

Cite this as: *BMJ* 2015;351:h5294

James Joseph Cockburn

Consultant psychiatrist (b 1932; q Trinity College, Dublin, 1953; FRCPsych, FRCPI), d 3 December 2014.
James Joseph Cockburn ("Jim") was appointed consultant psychiatrist to Long Grove Hospital, Epsom, and to Kingston Hospital in 1964. He later specialised in the psychiatry of old age and was an active member of the BMA. After retiring from the NHS he continued working for the mental health review tribunal. His health gradually failed during his last two years. He leaves his wife, Olga; his first wife, Ellen; four children; and 14 grandchildren.

Ann Cockburn, Olga Bowey-Cockburn

Cite this as: *BMJ* 2015;351:h5836

Derek Hubert Patrick Cope

Consultant anaesthetist (b 1922; q Middlesex Hospital Medical School 1945; FRCA), d 16 June 2015.
Derek Hubert Patrick Cope had a distinguished career. He was affiliated with many learned societies and associations. He published on a wide range of themes relating to his discipline, but was particularly interested in addressing the challenging problems of pain in childbirth. Another of his interests was the treatment of cerebral hypoxia, especially after severe dehydration. Predeceased by his wife, Constance, he leaves nephews and a niece.

Andrew P Cope

Cite this as: *BMJ* 2015;351:h5840

Dennis Mackay Jones

Honorary emeritus consultant microbiologist (b 1928; q Victoria University of Manchester 1954; OBE, MD, Dip Bact Lond, FRCPath), d 30 May 2015.
Dennis Mackay Jones became director of the regional public health laboratory in Manchester in 1975, a post he held until he retired in 1995. He was an honorary lecturer in bacteriology and medical microbiology at the University of Manchester for more than 27 years. Dennis leaves his wife, Beryl; two children; and four grandchildren.

Nigel Stanbridge, Ray Burrow, Alan Curry

Cite this as: *BMJ* 2015;351:h5690

Alexander Paton

Retired physician and former postgraduate dean, North East Thames Region (b 1924; q 1947; MRCS, MD, FRCP), died from old age on 12 September 2015.
Alexander Paton ("Alex") set up an endoscopy service and started a prospective study of cirrhosis of the liver that lasted 20 years and showed that alcoholic cirrhosis had a worse prognosis than many cancers. His achievements included teaching, writing, and lecturing extensively on alcohol misuse. Predeceased by his wife and by one of his children, he leaves four children, 10 grandchildren.

Alexander Paton

Cite this as: *BMJ* 2015;351:h5123

James Thomas Scott

Retired rheumatologist Charing Cross Hospital (b 1926; q St Mary's Hospital 1949; FRCP, MD), died from old age associated with cerebrovascular disease on 28 August 2015.
James Thomas Scott ("Tom") was deputy head of the Kennedy Institute of Rheumatology and conducted research into gout, among other subjects. He published widely, edited a textbook, and was in charge of students' health before the arrival of occupational medicine at Charing Cross medical school. He retired from the NHS in 1991. He leaves his wife, Faith; three sons; and one grandson.

H J Scott

Cite this as: *BMJ* 2015;351:h5835

Henri Sueke

Specialist trainee in ophthalmology (b 1978; q Liverpool 2002; MD, MRCOphth), died in a cycling accident on 28 May 2015.
Henri Sueke started his career as a specialist trainee before being awarded an academic clinical fellowship in Liverpool in 2010. He was awarded his doctorate in December 2014. After completing his specialist training he took up a clinical fellowship in Sydney, Australia, where he was killed while cycling to work. He leaves his wife, Dani, and four children.

Stephen Kaye

Cite this as: *BMJ* 2015;351:h5844

Teresa Krystyna Szulęcka

Former consultant psychiatrist (b 1944; q Krakow, Poland, 1970; MRCPsych), died from pancreatic cancer on 4 December 2014.
Teresa Krystyna Szulęcka left her native Poland for England in 1974. A chance encounter started her career as a clinical psychiatrist in Bassetlaw, north Nottinghamshire, and later as a consultant in Doncaster and Leeds, before retiring early as a mental health officer in 1999. She had successfully overcome breast cancer in 1993. She leaves her husband, Karel.

Karel de Pauw

Cite this as: *BMJ* 2015;351:h5841

Robert Kilpatrick

Former president of the GMC and the BMA

Lord Kilpatrick of Kincraig (b 1926; q Edinburgh University 1949; CBE, MD, FRCP Ed, FRCP, FRCPS, FRSE), died from age related illness on 16 September 2015.

Lord (Robert) Kilpatrick of Kincraig, who died in September, was a physician, pharmacologist, medical school dean, and former president of both the General Medical Council (GMC) and the British Medical Association.

The only child of a Fife coalminer, Kilpatrick contracted tuberculosis as a teenager and later credited his ability to speed read to his months in hospital. He remained patron of TB Alert at the time of his death.

His son, Neil Kilpatrick, said that his father's youthful illness and the loss of his mother to breast cancer when he was just 17 influenced his decision to enter medicine. Kilpatrick entered the University of Edinburgh's medical school in 1946—joining a record number of students able to begin their studies with the end of the second world war. On qualifying he was awarded the Leslie Gold Medal, something his son says he was very proud of given the record cohort.

After conducting research on the pituitary gland at Harvard on a Rockefeller travelling fellowship in 1961-62, Kilpatrick returned to the UK. He became dean of the faculty of medicine at the University of Sheffield for three years from 1970, having been professor of clinical pharmacology and therapeutics there since 1965.

He was the second dean of the Leicester Medical School from 1975 to 1989, arriving at the same time as the first students as his predecessor served only one year. Kilpatrick was also professor and head of the department of pharmacology and therapeutics from 1975 to 1983, and professor of medicine for five years from 1984.

During his six year presidency of the GMC from 1989, he was involved in the development of *Good Medical Practice* and the *Performance Procedures*. He had joined the council in 1970 and served in various capacities for all but four of the next 25 years.

PHOTOSHOT

He was president of the BMA in 1997-98.

Having been awarded a CBE in 1979 and knighted in 1986, Kilpatrick was made a life peer as a crossbencher in 1996. Neil Kilpatrick says his father attended the House of Lords regularly when health or medical issues were being discussed—particularly for debates on euthanasia. "He was quite vocal on euthanasia since his GMC days. He felt it was fraught with problems and difficult to legislate on from a medical point of view."

"Kilpatrick was quite vocal on euthanasia since his GMC days. He felt it was fraught with problems and difficult to legislate on from a medical point of view"

Kilpatrick's attendance at the Lords declined over recent years as he aged, and he became a carer for his wife, who developed dementia.

He leaves his wife, Elizabeth, and their children: Neil, Kate, and John.

Chris Mahony, London
chris.mahony@cjmedia.biz

Cite this as: *BMJ* 2015;351:h5727

TASERS

Full effects of Tasers need to be characterised

Whether the discharge from Tasers can influence heart rhythm through a direct electrical interaction is unclear (Briefing, 21 November).

In an earlier editorial we noted that no human studies had shown that Tasers directly affect heart rhythm but that none had examined discharge applied to the precordium. However, a 2010 article reported a 240 beats/min cardiac capture in one subject during application of discharge to the frontal chest apparently overlying the right ventricle. The in-service Taser X26 was not used, but the UK's governing body determined it prudent to assume a similar effect with the X26.

Since then no human studies have mapped the cardiac response to discharge applied to the frontal chest overlying the heart.

Although serious adverse events associated with UK police use of Tasers may be comparatively rare, the full range of effects should be characterised in the public interest.

Robert D Sheridan
(rdsheridan@dstl.gov.uk)

Cite this as: *BMJ* 2015;351:h6585

MEFLOQUINE

Value of mefloquine in the military

Gogtay and Ferner (Editorial, 14 November) raise concerns about malaria chemoprophylaxis with mefloquine in British military personnel.

A British serviceperson last died from malaria in 1992, despite large numbers of personnel deployed to areas with high rates of malaria transmission. By contrast, France still has one death every two years.

Mefloquine is not the first choice according to UK Armed Forces policy, which follows national best practice based on regularly updated guidance from the UK Advisory Committee on Malaria Prevention. Choice of drug follows an individualised assessment of malaria risk. For example, mefloquine was taken by 0.4% of at risk personnel deployed to Afghanistan in 2007-14 and by 5.7% of those deployed to Sierra Leone in 2014.

Removing this licensed and effective drug from the options available would probably reduce the risk of rare and severe adverse effects but may increase the incidence of malaria and deaths from this largely preventable disease.

Andrew D Green (andy.green735@mod.uk)
Timothy J Hodgetts
David A Ross
Patrick Connor

Cite this as: *BMJ* 2015;351:h6584

Authors' reply

The lack of deaths from malaria in the past two decades in UK service personnel may indicate better treatment, not effective prophylaxis (previous letter).

Armed forces in other countries agree that mefloquine is not the first line agent, as do Green and colleagues, but its safety is still relevant—in 2010-14, 13 045 regular forces personnel received mefloquine. The House of Commons Defence Committee is currently investigating mefloquine. Frances Nichol, head of drug safety at Roche, stressed to the committee that doctors should assess individual patient risk before prescribing mefloquine. Green and colleagues state that mefloquine is used after an individualised assessment of malaria risk but logistic constraints and reluctance of troops to disclose a history of mental illness might prevent adequate individual assessment and skew the benefit-harm balance.

Robin E Ferner (r.e.ferner@bham.ac.uk)
Nithya J Gogtay

Cite this as: *BMJ* 2015;351:h6588

RESPONSE

PHE replies to Mike Rayner and colleagues

At Public Health England (PHE), we welcome debate on our sugar evidence package, but Rayner and colleagues (Editorial, 21 November) miss the complexities of reducing sugar consumption in the current food environment. Our report provides a detailed analysis of factors influencing food choices and diet, as well as possible measures to reduce sugar intake.

We chose a mix of methodologies that reflected the different weights of evidence available. Existing assessments of the impact of advertising mean it was acceptable to use conventional reviews to draw conclusions. However, the lack of studies into the effects of price promotions validates the analysis carried out.

Our analytical report provides government with a holistic and prioritised view of measures to lower sugar intakes. PHE maintains that controlling advertising, marketing, and price promotions, alongside reducing sugar in food and drink, would be more effective than a tax or other single measure.

Several complexities unfortunately prevented us from assessing the cost effectiveness of individual measures. However, we know that achieving the Scientific Advisory Committee on Nutrition's sugar recommendation within a decade will save the NHS £500m each year and countless lives.

Our report is robust and comprehensive. Our remit is to share it with government to enable a policy to be developed. We will continue to work with government to tackle obesity and its consequences.

Alison Tedstone
Victoria Targett (PHE.Enquiries@phe.gov.uk)

Cite this as: *BMJ* 2015;351:h6591

FINANCIAL INCENTIVES

Don't pay GPs to reduce unnecessary referrals

Financial incentives work, but not usually as well as those who introduce them hope for (Head to head, 21 November). They can also have perverse or unintended consequences, so "pay for performance" schemes should maximise the benefits and minimise the risks. One fundamental principle is to ensure that professional and financial incentives are aligned as closely as possible. When doctors are incentivised to do things that they believe conflict with their professional duties, the risk of perverse outcomes increases.

These well tested observations mean that the last thing the NHS should be doing is to pay doctors not to refer patients to hospital. If you were a patient, would you really want to visit a GP thinking that his next skiing holiday might depend on him not referring you to a specialist? If variation in GPs' rates of referral is a problem, there are better ways to deal with it.

Martin Roland
(mr108@cam.ac.uk)

Cite this as: *BMJ* 2015;351:h6593