comment

"Child and birth related mortality are hit hard by armed conflict" **JULIAN SHEATHER**
"Doctors need to break the cycle of blame and reputational damage" **DAVID OLIVER**
PLUS Protecting UK's world beating covid data collection

PRIMARY COLOUR Helen Salisbury

Expressing empathy

I spent many years as a medical teacher attempting to coach students in the art of empathy. Some needed very little prompting, instinctively knowing what to say and when to say nothing while just sitting quietly. Others were on a longer journey, needing pointers about what to actively avoid and practice in being comfortable with silence.

This theory recently became reality for me from the other side of the divide. I found myself on the receiving end of a lot of sympathy and empathy and am bracing myself for more to come. As an intellectual exercise (always a useful retreat when times are hard), I have been trying to analyse what makes some expressions of empathy comforting and welcome whereas others make me inwardly cringe. Each person will have different rules, but mine go something like this:

Do not use stock phrases. "I'm sorry for your loss" makes people sound as if they have escaped from an American police drama. "I'm so sorry" is enough.

"I understand this is a lot for you to take in right now" suggests that someone is feeble minded as well as distressed and should be avoided at all costs. They might be too upset to remember every detail, so if they're going to need the information, write it down and give it to them to read later.

Have the confidence to be yourself; try to drop the formality and shrug off your metaphorical white coat. "I am so sorry that you are having such a difficult time," is ok, but the simpler: "Sorry, this is really horrible" goes down better.

When it comes to the amount of medical detail you share, do keep checking what the patient or relative does or doesn't want to know, as people have very different needs and comfort levels.

And when you don't know what to say, that's ok. Silence is fine, as long as you don't look uncomfortable with it. If they want to talk, they will, but you don't have to encourage them to do so, or explain that there is no hurry, or tell them that you are there to listen. Don't say it, just do it.

The ritual use of tea in the British processing of shock and grief should be respected. Preferably in proper china mugs rather than flimsy plastic cups that scald.

And if this sounds too hard, don't worry. What comes through most strongly in every interaction is the underlying intent. Even if your words are clumsy and you look a bit uncomfortable, your wish to be kind will show—and in the end, that is what they will remember.

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Try to drop the formality and shrug off your metaphorical white coat

OPINION Julian Sheather

As Russian troops invade Ukraine, we need reminding of war's impact on health

The effects of war on health are both intimate and general. Health impacts are immediate—people are wounded and killed—and then the impacts ripple outwards, in space and time. The repercussions echo through individual lives and, all too often, down the generations. In the first minutes, hours, and days of a hot war, physical trauma is primary: individual human bodies are mutilated by the ferocity of modern munitions. Lives end or are changed forever. For all the talk of "smart" weapons, and targeted attacks, the first onslaughts are seldom restricted to combatants. Recent conflicts, such as those in the greater Middle East, have sucked huge numbers of citizens into the maelstrom, with devastating effect. Conflicts in Rwanda and Kosovo in the 1990s saw as much as 90% of fatalities among civilians. It is difficult to comprehend the scale of slaughter unleashed by industrial and technological war: the 20th century saw an estimated 191 million conflict related deaths—approaching half the current population of Europe.

The health impacts of war do not stop with trauma from the fighting. Crude estimates suggest that for each person killed directly by war, nine will be killed indirectly—although much will depend on the nature of the conflict and the underlying conditions for health in the countries in which it is fought. War degrades environments. Recent conflicts in Syria and Yemen have seen the deliberate targeting of both built environments and the health services integral to them. Even if Ukraine is spared direct targeting of its health facilities, the impact on health services

Without a rapid halt to hostilities, a cascade of longer term health problems will be released

and public health will likely be shattering, particularly if conflict spreads into urban areas. Civilian infrastructure is exquisitely vulnerable to modern conflict. With transport impeded, the flow of essential health goods interrupted, and health staff and patients unable to move, health outcomes, particularly among pregnant women and young children, will rapidly deteriorate—we know that child and birth related mortality are hit hard by armed conflict.

OPINION Jennifer Beam Dowd

The UK's covid data collection has been "world beating"—let's not throw it away

ITAR-TASS NEWS AGENCY/ALAMY

While the UK's perceived pandemic missteps abound, the country was truly "world beating" in at least one important arena—investment in crucial population data to help us understand the virus. Despite earlier reports that the Coronavirus Infection Survey carried out by the Office for National Statistics (ONS) was at risk of being scrapped, the government's new "living with covid" strategy has retained the scheme, although it's not yet clear to what extent. While these efforts could rightfully be scaled back from crisis levels, we need carefully to transition from pandemic to "endemic" to protect ourselves from lingering and future threats.

In a pandemic in which we've been overwhelmed with data, the ONS study has stood apart. Begun as a pilot in April 2020, the massive effort swabbed a random sample of almost 180 000 respondents in the UK each fortnight to test for current SARS-CoV-2 infection, with more than 5.5 million total swabs taken to date.

The study follows many people repeatedly, including within households, and also collects antibody data from finger-pricked blood on many respondents to measure both prior infection and response to vaccination. By establishing regular surveillance of infections in a large random sample of the population, the study captured positive cases regardless of whether individuals had symptoms and sought out testing or not. The value of having data that are representative of the population, rather than those who self-select into testing, can hardly be overstated. Scientists in the US who've been flying blind are holding up the ONS as a model and pleading for such a survey two years into the pandemic.

A window into wider trends

The ONS survey has been key in identifying true population trends in infection during the alpha, delta, and omicron waves, especially in younger age groups who are less likely to develop symptoms and seek out testing. Because we could estimate a true denominator of those infected, the survey also allowed us to estimate accurate infection fatality rates by age, confirming that covid was much more deadly than the flu. As vaccination rolled out in December 2020, the survey measured the rising proportion of the population with detectable antibodies across different age groups, and when those antibodies started waning.

ALEXANDER RYUMIN\TASS/GETTY IMAGES

Without a rapid halt to hostilities, a cascade of longer term health problems will be released. Where civilian infrastructure, including access to fresh water, sanitation, and a stable food supply, is disrupted, infectious diseases re-emerge. Unsurprisingly, human behaviour changes during conflict and non-communicable diseases linked to riskier behaviour increase. The mental health impacts of the conflict are likely to be extreme. The Ukrainian people have been living with anxiety about the intentions of its powerful neighbour for many years. They watched Russia annex Crimea and wage proxy wars in the Donetsk and Luhansk oblasts in eastern Ukraine. They know they are without direct western protection. And now, as a war of invasion gets under way, the mental health effects will be serious and enduring. Those directly caught up in the conflict will be at immediate risk of post-traumatic stress disorder, but depression, anxiety, and other stress related conditions, including alcohol and drug misuse, will also increase and once again these may have life long and even intergenerational impacts.

As we know from recent conflicts, the health effects of war can be displaced far beyond the borders of the countries involved. Some of the most significant global problems in health and human rights are a result of the health needs of millions of people displaced by modern conflict. People leaving war zones take their trauma with them. They suffer appallingly on the migrant routes into the more stable parts of the world. They are prey to a range of infectious diseases, they struggle to find nutritious food and housing that can support health.

The people of Ukraine have been victims of successive brutal regimes. In the Holodomor, or great famine of 1932-33, three and a half million Ukrainians were killed by Stalin's deliberate policy of starvation. Hitler invaded Ukraine in June 1941—three and a half million Ukrainian citizens were killed during the years of German occupation. Millions more Ukrainians died as soldiers in the Red Army. Once again Russia seeks to incorporate it, whatever the cost in human suffering. No surprise that historian Timothy Snyder called his book on Ukraine and its surrounding territories *Bloodlands*.

War destroys more than bodies and minds. It tears up the roots of human wellbeing, rips the fabric of human community, severs bonds between people and the places they inhabit. And it leaves an enduring legacy. War contaminates places of human habitation physically and psychologically. Traumatic memory can make the search for peace impossible. And without peace there can be no real hope of human health or flourishing. This invasion is not just a tragedy for today's Ukrainians. It will also lie heavily on the wellbeing of future generations.

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These data pipelines will save having to start afresh in the next crisis

Beyond infection prevalence, the ONS survey contributed to our scientific understanding of immunity from prior infection, real world vaccine effectiveness, and the vaccines' impact on transmission, which was not measured in clinical trials. As each new variant emerged, the world waited anxiously for the ONS survey's results on vaccine effectiveness, recognising its strength in avoiding the biases present in almost all other observational data.

While we may be learning to "live with the virus," SARS-CoV-2 is far from done with us. With legal mandates for self-isolation and other protections ending, as well as the phasing out of free testing, a random sample survey like the ONS's can give us the "best view from the crow's nest" as the prime minister Boris Johnson recently put it—to avoid crashing into the next variant iceberg.

Keeping this important surveillance in place can serve as an early warning sign without the need for mass population testing. While keeping our eyes glued to daily dashboards may have outlived its usefulness, covid-19 "weather" updates from ongoing surveillance can let people pack their umbrellas (or, in this case, masks) and adapt their behaviour to minimise the need for stricter mitigations.

Thinking bigger

It is likely that savings can be made in scaling back the frequency and size of the survey, but any changes should be strategically considered. There is an argument to be made for thinking bigger and expanding the scope of the study to leverage the infrastructure for testing other common pathogens, such as flu or respiratory syncytial virus. Covid-19 has laid bare how appallingly little we know about the basic prevalence, transmission dynamics, and immune response to many common but serious infections. While the UK's 30 000 annual deaths from flu and pneumonia are dwarfed by what we've seen from covid-19, reducing this by even 10% from better surveillance would have knock-on effects for tens of thousands of GP visits and hospital admissions each year.

Understanding the long term biological, social, and economic impacts of the pandemic will be a high priority for years, if not decades, to come. The data infrastructure we have built up can continue to provide gold standard estimates of these impacts. From following people over time since the early stages of the pandemic, data from the ONS survey can tease out not just the impact of infection itself, but distinguish the impact of reinfection, infection before or after vaccination, or infection with specific variants.

Beyond the ONS infection survey, the UK has been a world leader in creating rapid and accessible data linkages, including to electronic health records, during the pandemic. While the current crisis poured much needed cash and talent into these massive efforts, maintaining the infrastructure will provide tremendous value even in non-pandemic times, providing insights for other important diseases, such as cardiovascular disease and cancer. Keeping these data pipelines and processes robust will pay ongoing dividends and keep us from having to start afresh in the next crisis.

Data have been power during the pandemic, but good data have been scarce. The UK is truly the envy of the world on this front, and we should remain good caretakers of our investments to promote population health and social and economic wellbeing for the long run.

Jennifer Beam Dowd, deputy director and professor of demography and population health, Leverhulme Centre for Demographic Science, University of Oxford

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ACUTE PERSPECTIVE David Oliver

How to improve doctors' influence

A few weeks ago I discussed how doctors can, and do, influence UK health policy. I wrote optimistically and didn't cover the downsides. So, for balance, now I will.

We are liable to forget we are just one of many professional groups trying to persuade MPs, ministers, the media, and senior officials of our cause. Even within healthcare, different sectors have their own priorities. For example, as we emerge from the pandemic, positions on prioritising investment in prevention policy, general practice, acute care capacity, elective care recovery, or social care have varied, according to which group is lobbying.

Wherever possible, unified, cross sector campaigns and positions can help, especially if this allyship comes with constructive, practitioner led solutions.

On occasion, professional groups are ignored and crudely characterised as having vested interests or as getting between ministers and "overdue reforms." Changes to contracts or performance targets have sometimes been imposed in the face of open opposition from trade unions and membership organisations. The government's lifting of all covid protection restrictions in England on 24 February was quite clearly motivated by political considerations and not advised by the Scientific Advisory Group on Emergencies, nor enthusiastically endorsed by the chief medical officer and chief scientific adviser.

And there have been times—for instance, the introduction of waiting time targets for acute and planned care by Tony Blair's government—when the momentum for change came more from politicians and their regard for voters' priorities than from the medical profession. At other times politicians have listened, but only to select medical voices that reflected their ideology, while being selectively deaf to other views.

Finally, even when our policy positions are coherent, well aligned, and evidence based, style matters. The message may be right but the communication wrong and we appear too defensive or self-interested. Recent media campaigns and political targets about face-to-face consultations are a case in point. By acknowledging this is a big concern for patients, that we too are distressed by being unable to offer the kind of service we want to—before going on to explain the reasons for the problems and what solutions might help—we might break the cycle of blame and reputational damage.

Sometimes, this approach may seem counterintuitive. Even if it feels less satisfying than being ever more strident, and even if it means collaborating with governments whose policy leanings we are deeply opposed to, adopting a different approach can be more effective.

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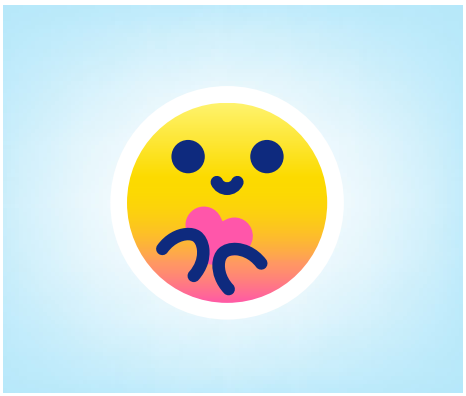
Even when our policy positions are coherent, well aligned, and evidence based, style matters

LATEST PODCAST



Can you learn empathy?

Empathy is one of the essential qualities of a good doctor, but can it be taught? In this episode of Sharp Scratch, David Jeffrey, a retired palliative care doctor and former academic mentor at Dundee Medical School, talks about what he found from doing a doctorate exploring empathy in medical students. He starts by tackling the idea that medical students' empathy often wanes during training:

"Empathy is such a complex experience that it's kind of artificial to measure it. What are you actually measuring when you try and have a scale? You might be empathetic one day, the next day you might be moving house and not feel empathetic, but you're the same person. The main change I saw with students was that at the beginning they were fixated with either I am empathetic or I'm not empathetic. But by the time they were doing their final years, they could see empathy more as a relational thing between two people. Certainly, some students identified barriers that made them hide their empathy. They still felt they wanted to connect with patients, but their work environment stopped them doing it."

Jeffrey describes the importance of empathy in the doctor-patient relationship and why it makes the practice of medicine more rewarding:

"If you maintain what's called professional detached concern—in other words, you just stick to the cognitive stuff and don't go into emotions—you will never be aware of some of the aspects of suffering and existential distress that patients have. It's sort of a myth that to connect emotionally with patients is a bad thing. I don't know where that's come from, but certainly using detached concern and detaching from patients is not a good coping mechanism. You end up with more burnout and lack of job satisfaction."

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Edited by Kelly Brendel, deputy digital content editor, *The BMJ*

ANALYSIS

Tackling the politics of intersectoral action for the health of people and planet

Kent Buse and colleagues argue governments need to address facilitators of and barriers to international responses to climate breakdown

Human activities are wreaking extensive damage on the natural systems of the planet and undermining the prospects for the health of current and future populations. The 2021 report of the Intergovernmental Panel on Climate Change provided further evidence of the increasing urgency of responding to the threats posed by climate change—which the UN secretary general labelled "a code red for humanity."[1 2]

The UN climate conference in Glasgow (COP26) laid bare the highly political nature of international cooperation on climate change, and the futility of failing to recognise that the health and sustainability of the environment are the cornerstone of equitable development.[3 4] The politics inherent in intersectoral action on climate and health may be less visible than COP26 but must be addressed to deliver the goals of the Paris agreement.[7]

International health manifestos have long called for intersectoral action,[8 9] and it is a central tenet of the UN's sustainable development goals. Nonetheless, progress on climate-health intersectoral action has been meagre despite recognition of their shared determinants.[10-12]

The scale and magnitude of the challenges facing humanity in the Anthropocene epoch provide a new imperative for intersectoral action on climate and health. The literature offers many lessons on the mechanisms and conditions under which intersectoral action is effective, often describing its barriers and facilitators. We argue that the key to making climate-health intersectoral action work hinges on thinking politically about it (box 1).

KEY MESSAGES

- Emphasising the co-benefits to health of actions to counter environmental change in other sectors could help to motivate more ambitious intersectoral action
- Intersectoral action is beset by political challenges, as evidenced by the watered down commitments that emerged from the COP26 summit in Glasgow
- Barriers to intersectoral action include outdated institutions, the influence of vested interests, and limited ability of evidence and technocratic approaches to shift the political dial
- Enablers include political demands arising from social movements that are pressuring governments to confront climate breakdown and its impacts on human health
- The key to unlocking the potential for intersectoral action will be visionary leaders defining ambitious, long term shared goals that motivate civil society action, and independent monitoring

LAURENE BECQUART/AFP/GETTY IMAGES

Lack of political support for shared goals across fragmented structures is a substantial constraint

Barriers and facilitators to intersectoral action

Health (and illness) results from actions taken by individuals, communities, corporations, and governments within and, crucially, outside the health sector. The same logic applies to planetary health,[16] with health, business, and environment literature reporting similar barriers to, and facilitators of, intersectoral action.[17-22] We conducted a pragmatic review, grouping the wide variety of barriers and opportunities described into seven themes.

Applying a political lens to barriers

Lack of political support

The lack of political support to impose shared cross sectoral goals across fragmented bureaucratic structures is a substantial constraint to intersectoral action. A signal that those in authority value such action is needed to establish the policies, financing, and structures to facilitate and incentivise collaboration; put the right people in boundary spanning posts; and to ensure accountability mechanisms to drive, chart, and correct progress.

Box 1 | Thinking politically about intersectoral action—the "three I's"

The extent to which intersectoral action facilitators can be realised and barriers overcome depends on the associated political dynamics (who gets what, when, and how[13]). This is reflected in the policies and policy environments associated with intersectoral action, and these are influenced by the three I's[14 15]:

- Ideologies—ideas, values. and beliefs that influence political positions and the framing employed to inspire action
- Interests—incentives facing stakeholders to engage on specific issues and the power they wield as well as the commitment with which those interests are pursued
- Institutions—structural factors that shape the rules governing policy processes

The long timeframes and complexity involved can dissuade leaders from spending political capital on intersectoral action. When intersectoral action would entail confrontation with commercial interests, power imbalances between private and public sectors can lead to political apathy. And even if there are attempts to address these imbalances to overcome such apathy, policy makers will often remain cautious in tackling vested commercial interests. Despite the centrality of politics to the success of intersectoral action, a review of the governance supporting a health in all policies approach found "significant naiveté when it comes to the politics and power games and the role that the health sector can or should play."[38] The same is true in the environment sector. For example, an analysis of intersectoral action to stop deforestation concludes that it takes civil society activism to apply pressure on decision makers to take the lead on intersectoral action.[39]

Inadequate leadership and links

A core leadership function of government is to promote the public good and mitigate public harm, particularly through regulatory and fiscal measures. With the imbalance of economic power between government and industry (corporations rather than states now comprise most of the world's 100 largest revenue generators),[40] leadership for effective regulation to address critical public issues across multiple sectors is increasingly challenging and inadequate.

Lack of leadership on the intersectoral action agenda reflects competing interests and ideologies and weak links across these. Scientific evidence on topics from tobacco to climate change has been undermined by vested interests sowing doubt to weaken the case for action.[41] In the health sector, perhaps the most important barrier is that many people in leadership positions have a biomedical focus and either do not appreciate the critical role of the political and social determinants of health or are overwhelmed by unfamiliar challenges.[42] For some, leadership on intersectoral action would mean establishing new relationships outside their comfort zones. Others may view intersectoral action as a threat to their authority or resources–affecting their interests and hence incentives for collaboration.

Organisational and institutional constraints

These barriers to intersectoral action stem partly from organisational cultures and disciplinary training. Narrow specialisation may not value collaboration and cooperation nor foster mindsets and skillsets amenable to working with other sectors, as well as encouraging inaccessible, specialist language. These weaknesses might result in a failure to consider incentives and goals pursued by other sectors, which is essential for sustainable collaboration. In the case of cooperation on health in all policies, it has been argued that "starting with the health argument may be counterproductive or politically inappropriate."[38] There is also institutional inertia that hinders organisations established with a limited set of goals from pivoting to embrace shared goals. So, while organisational cultures remain more likely to lead to rivalry than a spirit of cooperation for intersectoral action, leaders who have collaborative tendencies may find themselves on the periphery of policy making.[38]

Lack of leadership on the intersectoral action agenda reflects competing interests and ideologies

Applying a political lens to facilitators

Executive leadership

Executive leadership (that is, leadership that transcends ministries, sectors, or departments), exercised at all levels, is a critical facilitator. Such leadership creates the ultimate political will for sectors to cooperate in that it is authoritative, can shape mandates, and demand compliance. The exercise of that leadership can take many forms, including altering the incentive structures of those who might otherwise pursue narrow sectoral goals; appointing boundary spanning staff (with contacts in and understanding of the culture of both organisations) to positions of authority; and establishing institutional arrangements and environments across government that facilitate intersectoral action.

Executive leadership is uniquely placed to provide intersectoral action on finance and cross sector budgets, as well as the mechanisms to hold ministries and other organisations accountable. By virtue of their positions, executives can often see the bigger picture, including overarching goals that transcend sectors, and define narratives that speak to shared values and inspire those around them to action.

What creates and sustains such leadership varies according to context; it might be a response to international commitments, a new economic imperative, carefully crafted narratives from advocates, or political demands from specific constituencies.

Shared cross sectoral goals and coordination

Structural mechanisms established by governments for coordination across ministries through joint committees, shared workplans, and pooled budgets are crucial to intersectoral action, as exemplified in the health-in-all policy approaches. From a political perspective, the success of these initiatives depends on acknowledging and accommodating diverse and sometimes competing interests. "Soft" elements are also important, including the creation of organisational cultures and ideologies that reward such efforts, providing incentives, and building informal networks across ministries to foster shared values and trust.

Civic mobilisation

Changing behaviour for human and planetary health requires interaction between the public (both as citizens and consumers), policy makers, and private sector leaders. Governments have an obligation to serve public interests, but this often requires "bottom-up" demand. The Montreal protocol on ozone depleting compounds provides a good example of the science community providing compelling evidence around which to mobilise and

foster commitment to change.[43 44] Citizens have an important role in demanding change or more ambitious action[45] through consumer choices, civil society organisations, and social movements. They can also be a powerful voice demanding urgent and coordinated action across government, as shown by the activism of the AIDS movement.

Accountability

Robust governance and accountability mechanisms are a prerequisite for intersectoral action as they document responsibility for actions. Legislation in support of intersectoral action, often in response to political mobilisation, can have a similar effect and moreover can have a lasting effect beyond any particular administration. Examples include the Public Health Act in South Australia and the mandate for health equity in Scandinavian municipality budgets.[46 47]

Poorly conceived intersectoral action can lead to blurred lines of accountability. This can be mitigated with clear goals, an explicit division of labour, and integrated accountability wherein the contributions of different sectors are considered holistically. Independent review by people who are not directly involved in policy or implementation can identify barriers such as vested interests as well as shared goals and lessons. The UN secretary general's independent accountability panel for the Every Woman Every Child project shows the success of this approach (box 2).

Box 2 | UN independent accountability panel: a model for intersectoral action

- The UN secretary general mandated the formation of the independent accountability panel for the Every Woman, Every Child, Every Adolescent (EWEC) initiative in 2016[48]
- The group of experts evaluated 10 years of work in the EWEC movement and evolved its accountability framework. In the process, they consulted widely, gathered and evaluated evidence, and listened to people's experiences of accountability for their health and rights
- In the resulting report the panel sets out an accountability framework for health across the sustainable development goals (SDGs)
- The overarching recommendation is to move towards holistic, people centred accountability by meaningfully engaging all major SDG groups and other stakeholders at regional, country, and global levels, and institutionalising an independent review mechanism for intersectoral action on health across the SDGs
- The framework provides a coherent, evidence based tool that any country or organisation can use to inform its accountability

Going forward

The facilitators of intersectoral action seem to be synergistic. From a political perspective, leadership on intersectoral action would be more forthcoming if there were demands from civil society. And sectoral leadership would be more responsive to intersectoral action if inspired by the vision of what it can deliver, transcending the insular mantras and priorities of any individual sector.

Compelling narratives are also key to mobilising politicians and the public. The independent accountability panel suggests that putting people, as opposed to economic growth, at the centre of policy can help secure support. Those vested in human health and planetary health share the fundamental value of tackling inequality, which ought to provide common ground to foster collaboration.

From the top, a more systematic approach with clearer articulation of which ministries should initiate and lead on different intersectoral action on climate and health issues is critical, not least so that the relevant people can be held accountable, including by civil society. And for sustained climate-health intersectoral action it will be critical that the current demands are channelled into legislation. Litigation can help to advance mitigation action, and about 1000 cases have been brought worldwide between 2015 and 2021.[49]

Well designed and implemented carbon pricing and subsidy removal can accelerate intersectoral action by redirecting resources to actions that improve health equity as well as cutting greenhouse gas emissions.[50] Health indicators should be integrated into reporting of efforts to reduce emissions and build resilience to climate change.

To date, political dynamics have served as barriers to intersectoral action. Yet there are grounds for optimism. The Human Rights Council recently recognised the right to a healthy environment,[51] which may lead to greater attention and new legislation. The activism of climate campaigners provides further reasons for hope. It may newly politicise public health, which has grown away from its overtly political roots,[52] and thus encourage intersectoral action. At the same time, public health should aim to diminish political polarisation by focusing on common aspirations for a healthy and sustainable future that can command widespread support.

Divisions are emerging within the private sector between those that see their future business model tied to a more sustainable economy and those who base their future on opposing change, with a large middle group that could lean in either direction. The challenge is to strengthen those focused on a more sustainable economy and influence the undecided by calling out attempts at "greenwashing." Substantial investment is required in informing and engaging the public on tracking commitments made by governments and corporations, as well as in independent verification.

Linking climate-health intersectoral action to existing political processes holds considerable promise. One opportunity lies in the development of the UN Framework Convention on Climate Change, building on work on health in the nationally determined contributions to climate action under the Paris agreement.[53] Another opportunity lies in the review process of the sustainable development goals, which spans from local up to a high level political forum.[54] An independent review mechanism to report on climate-health intersectoral action to the forum could provide the structure to drive progress.

The sooner we act politically on the facilitators and barriers to intersectoral action, the closer humanity will be to realising the right to a healthy environment and the goals of sustainable development.

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LETTERS Selected from rapid responses on bmj.com

LETTER OF THE WEEK

Underplaying the dangers of cannabis in pregnancy

Nutt overstates the case for medicinal cannabis and misrepresents harms in pregnancy when dismissing Chris Whitty's warning to MPs: "We have to conduct research in such a way that we avoid another thalidomide tragedy" (Essay, 29 January).

Cannabis can cross the placental and blood-brain barriers and is excreted in breast milk. The scope is wider than pregnancy alone as it accumulates and is active for many weeks. Thus, exposure during pregnancy is not avoided by stopping use just before becoming pregnant or in early pregnancy. Teratogenicity was reported as early as 1968, and includes anencephaly, oesophageal atresia, diaphragmatic hernia, gastroschisis, ventricular septal defect, and Ebstein's syndrome. Cannabis increases the likelihood of stillbirth, preterm birth, fetal growth restriction, and low birth weight.

Cannabis use compromises offspring's long term neurobehavioural development. Changes in brain microstructure and intellectual function have been noted in adult chronic cannabis users and seem permanent in early users, so it should be no surprise that stimulation of cannabinoid receptors in the perinatal period alters brain maturation and affects neurodevelopmental outcomes. Developmental cannabis exposure also changes epigenetic processes. These gene alterations are potentially heritable and can affect the immune system and brain maturation.

This is a public health issue. In the US, cannabis use during pregnancy already exceeds 8%. Nutt's essay ostensibly deals with the medical indications for a drug that has not yet found its safe place in the medical armamentarium, but he gives the wrong information, flying in the face of the US Food and Drug Administration and professional associations' advice against cannabis use during pregnancy and breastfeeding. This plays straight into the hands of those businesses that chose the tobacco industry's successful model of minimising tobacco harms. Alongside alcohol and nicotine, will another profitable, dependence inducing product be commercialised despite causing harms to future children?

Alain Braillon, former senior consultant, Amiens
Susan Bewley, emeritus professor of obstetrics and women's health, London

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DOCTORS' MORAL IMPERATIVE TO SUPPORT MEDICAL CANNABIS

An evidential rather than moral imperative

Nutt encourages cannabis prescription (Essay, 29 January), generally without the justification provided by conventional evidence, such as randomised controlled trials. Such sweeping advocacy seems radical, particularly as the available evidence paints an incomplete and sometimes disappointing picture of cannabinoid efficacy.

Equally concerning is Nutt's tendency to downplay risks of harm, which range from motor vehicle incidents to severe psychiatric illness. Links between high dose tetrahydrocannabinol and psychosis are discounted, at variance with the experience of inpatient psychiatrists around the world. Cannabis use is associated with increased contact with mental health services and poorer prognosis of anxiety and depressive disorders.

The "moral imperative" to prescribe cannabis should be trumped by our ethical obligation to act in patients' best interests, based on available evidence and tailored to the individual. Low rates of cannabis prescription in the UK might also reflect doctors' wariness of adverse effects and a cautious wait for better evidence of efficacy.

Nicholas R Hoeh, academic psychiatrist; David B Menkes, academic psychiatrist, University of Auckland

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Local regulatory systems hinder prescription

Nutt opines that doctors' prejudice and fear are limiting the prescription of medical cannabis (Essay, 29 January). But the problems are local medicines regulatory mechanisms and the multilayered interface between national and local policies in prescribing.

The cannabis based medicine nabiximols was formally approved by NICE in November 2019 for uncontrolled spasticity in the small number of patients with multiple sclerosis for whom other treatments do not work or are not tolerated. One might assume that it can be prescribed by a specialist without further validation and approval. But this is still not always the case.

Discussions go back and forth between medicines optimisation committees and area prescribing committees, with evidence repeatedly assimilated and presented at both settings. Area specific joint prescribing protocols require drafting and agreement as well as delineation of lines of responsibility for funding. Consequently, nabiximols can still not be prescribed in many parts of the UK.

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CARE QUALITY COMMISSION INSPECTION RATINGS

Making inspections fair for all

The British International Doctors' Association (BIDA) has long held that there is a disparity in CQC inspections of general practices run by doctors from ethnic minorities (This Week, 5 June 2021).

We advise GP teams to use a robust and methodical approach for each inspection. GP leads should plan this well ahead of time, looking to experienced organisations, such as the Royal College of General Practitioners, for guidance.

The CQC will still find flaws at some inspections, but rather than closing these practices, serving breach notices, or tarnishing them with inadequate ratings, we hope it will give sufficient time to allow remedial actions to be taken.

Doctors who think they have been treated unfairly should seek expert guidance; our members can contact BIDA. We would be happy to work in partnership with the CQC to improve the inspection and monitoring regime to create a process that is fair for all.

Amit Sinha, general secretary; Anita Sharma, chair, Women Doctors' Forum, British International Doctors' Association; Shikha Pitalia, medical director, SSP Health

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OPINION Mohammad S Razai and colleagues

Now is the time for radical action on racial health inequalities

A new report by the NHS Race and Health Observatory makes robust recommendations—we must act on them

TOBY MELVILLE/REUTERS/ALAMY

The magnitude of racial health inequalities reported in the NHS Race and Health Observatory's recent review comes as no surprise.[1] It highlighted the overwhelming, stark, widespread, and longstanding inequalities that people from ethnic minorities in the UK experience in access to healthcare and outcomes. The report found that this occurs "at every stage, throughout the life course, from birth to death" and is "rooted in experiences of structural, institutional, and interpersonal racism."[1] This evidence has been known for a long time, with the disproportionate impacts of covid-19 on people from ethnic minorities drawing even greater attention to and wider recognition of these facts.[2 3] Will evidence, however, be enough to compel those charged with the nation's health to acknowledge and take urgent action to redress these egregious inequalities?

First, there are significant gaps in the literature, as well as poor quality, inconsistent, and incomplete data in some places. Second, the review only focused on five "priority" areas: mental health, maternal and neonatal care, digital healthcare, genomic medicine, and the NHS workforce. However, the evidence that exists, which spans over a decade and has been examined by this independent body, should be a wake-up call for the government and the NHS.

Fear and distrust run through most of this review, particularly in mental healthcare, maternal care, and digital access. Furthermore, negative experiences, poor communication, and substandard care marked by insensitive, discriminatory interactions are also common among ethnic minorities, who are then deterred from seeking care from the NHS.

Significant barriers

There are significant barriers to accessing psychological therapies, including cognitive behavioural therapies and children's mental health services, because of fewer referrals from general practice, but also lower levels of health literacy, poorer access to online services, and resultant challenges to self-referral. This illustrates the need for a broader approach to tackle health inequalities, including working on areas such as education and poverty.

People from ethnic minority groups, particularly black people, are more likely to face compulsory admission to psychiatric wards, receive harsher treatments, and are more likely to be restrained and put into seclusion.[1 4] NHS staff from ethnic minorities do not fare any better than patients. Their experiences are marked by racist abuse—both from patients and other staff—lack of career progression, and an ethnic pay gap.[1 5]

The review suggests robust recommendations on how

A sincere attempt to understand and engage with communities will do much to establish trust

to bring about a radical and imaginative change in policy, practice, attitude, and approach. It starts with better, more accurate, and granular ethnic data monitoring in the NHS and linking these clinical data across the health service to improve clinical outcomes for ethnic minority groups. It is also necessary to improve access to and experiences of care by more targeted investment, as well as providing resources for some areas, such as high quality interpreter services.[1]

There is also much that needs to be done to build trust. The impact of the covid-19 pandemic, especially the lower uptake of covid-19 vaccines among certain groups, has brought the matter of trust into sharp relief.[6] Trust cannot be built if the government continues to abnegate responsibility and turn its face away from the lived experiences of racism, in particular systemic racism, among ethnic minorities. A sincere attempt to understand and engage with communities will do much to establish trust, which will, in turn, lead to better health outcomes.

Neither evidence nor a clarion call for action alone—no matter how clarifying and stark—would lead to meaningful change. We have been here before. Numerous past inquiries have made urgent calls for a new approach, only to be frustrated by inaction, endless deferrals, and delays.[3]

A strong political will is, therefore, required to turn the wheels of change. Inaction costs lives and would lead to a worsening of systematic socioeconomic and health inequalities. For those of us who have raised the ineluctable facts of racism—in particular systemic racism—as a major driver of racial health inequalities,[7] our position is perhaps encapsulated by the author and public intellectual CS Lewis in his 1942 novel, *The Screwtape Letters*, "The greatest evil is done not in sordid dens of evil that Dickens loved to paint, but it is conceived and ordered (moved, seconded, carried, and minuted) in clear, carpeted, warmed, and well-lighted offices, by quiet men with white collars and cut fingernails and smooth-shaven cheeks who do not need to raise their voices."[8]

The time to tackle unconscionable racial health inequalities in this country is now and the NHS Race and Health Observatory's review can help start that change.

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Mala Rao, director, Ethnicity and Health Unit, Imperial College London

Azeem Majeed, professor of public health and primary care, Imperial College London

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William Paton Maclay

Lieutenant colonel Royal Army Medical Corps and medical director Sandoz (b 1926; q Glasgow 1950; DTM&H (Eng)), died from pneumonia on 18 July 2021

William Paton Maclay ("Bill") did his national service with the Royal Army Medical Corps in the UK and Asia. He specialised in dermatology and venereology and became interested in tropical diseases. He loved serving in the army, but his young family required a more stable environment and he joined Sandoz and ultimately became medical director. He relished his time there over some 20 years—overseeing clinical trials, lecturing around the world, and leading a team. Bill retired to Hampshire in the late 1980s. He was a keen sportsman and an avid golfer. Predeceased by his wife of over 40 years and a subsequent partner of over a decade, Bill leaves two children, two grandchildren, two great grandchildren, and an extended second family.

Michael Maclay
Carolyn Maclay

Cite this as: *BMJ* 2022;376:o226

Richard Bax

Senior partner tranScrip and visiting senior research fellow Sackler Institute of Pulmonary Pharmacology, King's College London (b 1946; q Royal Free Hospital, London, 1970; MRCS, MRCGP, FFPM, FRCP (Edin), FRCP (Lon)), died from Parkinson's disease on 6 January 2022

Richard Bax had a rich family heritage of innovation in healthcare and infectious disease. After specialising as a GP, he was inspired by the opportunity for therapeutic development offered by emerging pharmaceutical companies and joined Glaxo in the mid-1970s, but continued to do GP locums. He led the introduction of three hospital cephalosporins and was involved in the development of meropenem. Richard never lost sight of his African roots, working for a US not-for-profit company on prevention of HIV transmission and on antimalarials and anthelmintics at ICI and SB Pharma. He leaves his wife, three sons, and six granddaughters.

Flic Gabbay

Cite this as: *BMJ* 2022;376:o214

David Elliott

Professor of occupational medicine Robens Institute, Guildford (b 1932; q St Bartholomew's Hospital 1956; OBE, DPhil), died from cancer on 18 January 2022

David Elliott did his national service in the Royal Navy as a surgeon lieutenant commander and then specialised in research in underwater medicine, including three years at the National Institutes of Health in Bethesda, USA (1969-72). His dedication and achievement were recognised with an OBE. In 1976 he was appointed chief medical officer for Shell UK.In 1989, he became a professor of occupational medicine at the Robens Institute in Guildford. He wrote textbooks on diving medicine, enjoyed lecturing, and was also an expert witness on numerous complex legal cases after diving accidents. He leaves June, his wife of 62 years; four daughters; and nine grandchildren, who will all miss him deeply.

June Elliott, Joanna Elliott, Kathy Curtis, Susie Hackett, Pippa Mintoft

Cite this as: *BMJ* 2022;376:o215

Peter George Tipping Ford

GP Hythe and secretary Medical Protection Society (b 1931; q St Bartholomew's Hospital, London, 1956; MRCGP, DObst RCOG), died from old age on 17 December 2021

Peter George Tipping Ford spent his national service in the Royal Army Medical Corps. On demobilisation and after an obstetric house job at the Buckland Hospital, Dover, he joined a practice in Hythe, Kent, in 1960. After eight years he changed career and joined the Medical Protection Society as a medical adviser. Rising through the ranks, he was sent to Leeds to set up a new regional office. This accomplished, he returned to London and in due course was appointed secretary to the society in 1983. He retired at 60 and spent the next 30 years at Hythe with his wife, Nancy, whom he had met at the North Middlesex Hospital. He leaves Nancy, four daughters, 13 grandchildren, and four great grandchildren.

Jennifer Ford, John M T Ford

Cite this as: *BMJ* 2022;376:o223

Andrew Fowell

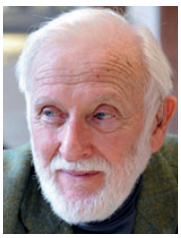
Consultant in palliative care (north west Wales) Betsi Cadwaladr Health Board (b 1955; q 1978; MRCGP, Diploma in Palliative Medicine), died from injuries sustained in a bicycle crash on 25 September 2021

Andrew Fowell ("Andy") undertook his junior doctor training in Leeds and then joined the GP training scheme in Bangor, north Wales. He returned to Yorkshire in 1983 and became a GP partner in the practice in Great Ayton. The challenge of providing good end-of-life care for his patients motivated him to make a career change and train as a palliative care specialist. He returned to Wales in 1996, completed his specialist training in palliative care, and became one of the first palliative care consultants in Wales and the first in north Wales, where he worked until his retirement in 2013. He continued to enjoy teaching. Andy leaves his wife, Anne; two children; and two grandchildren.

Stephen MacVicar

Cite this as: *BMJ* 2022;376:o225

Alexander Farquharson MacDonald



Neuroradiologist (b 1929; q Edinburgh, 1952; DMRD, MRCP (Edin), FFR, FRCR, FRCP), died after a short illness with septicaemia on 16 January 2022

Alexander Farquharson MacDonald ("Sandy") was a conscientious objector and worked in a Quaker hospital in Korea in 1953-55. He trained in Edinburgh and was appointed consultant in Aberdeen in 1964, bringing best practice in neuroradiology to the north of Scotland. He had high standards and expected nothing less from those around him, for the benefit of patients and often to the amusement of his loyal radiographers. Of his many trainees, six became neuroradiologists worldwide. Sandy's Christian socialist beliefs brought fairness and justice to everything he did. Always aware of those less fortunate than himself, he could deflate pomposity at a single stroke. His passion for football endured until the end. He leaves his wife, Joan; four children; and six grandchildren.

Tom Scotland, Alison Murray

Cite this as: *BMJ* 2022;376:o236

John Hermon-Taylor

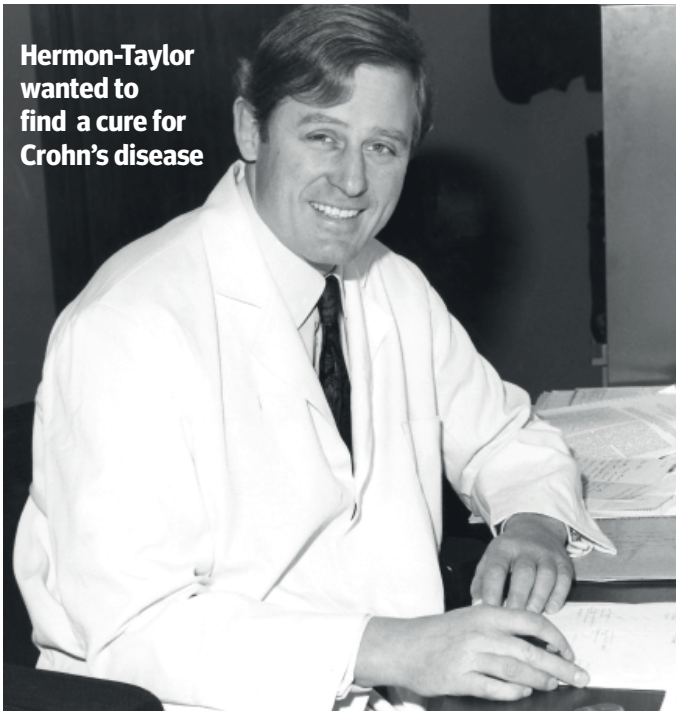
Surgeon and expert in Crohn's disease

John Hermon-Taylor (b 1936; q Cambridge 1960; FRCS Eng), died after a brain injury on 16 October 2021

John Hermon-Taylor was born into a medical family in London. Educated at Harrow School, he graduated from St John's College, Cambridge, with a degree in medicine in 1960. In 1963, he obtained the fellowship of the Royal College of Surgeons, winning the prestigious Hallett prize awarded to the highest scoring candidate. Five years later, he travelled to the Mayo Clinic in Rochester, Minnesota, on a Medical Research Council scholarship, where he met his future wife, the biologist Eleanor Pheteplace. They married in 1971.

Crohn's disease

In 1976, Hermon-Taylor was appointed professor of surgery at St George's Hospital, London, and began the work that would define his career. From his predecessor, he inherited a large cohort of patients with Crohn's disease, a severe form of inflammatory bowel disease with no known cause and no cure. At the time, few treatments for Crohn's were available, so many patients underwent surgery to remove diseased sections of their gut. This had limited success, as the condition would often re-emerge in other sections. Hermon-Taylor was upset by the plight of his patients. As an innovator and a problem solver, he did not just want better treatments but to find the cause and ultimately find a cure. So, in 1984, when American microbiologist Rod Chiodini sent him a sample of an unidentified bacteria he had isolated from a patient with Crohn's disease, he set to work to discover what it was. This bacterium took two and a half years to grow, so it was not until 1987 that he first unveiled the mystery bug as *Mycobacterium avium*, subspecies paratuberculosis (MAP), a bacterium related to tuberculosis (TB) which causes Johne's disease, a similar form of inflammatory bowel disease, in cattle. He began to analyse the genetic sequence of MAP and in 1985 discovered the IS900 gene, which is highly specific to MAP. He used this to develop a polymerase chain reaction test for MAP (based on detecting the IS900 DNA sequence) and conducted studies showing many people with Crohn's disease were infected with MAP and that tiny traces of MAP were present in milk, suggesting a route of transmission from cows to humans. Many healthy patients were also found to have MAP, however; like TB, where many apparently healthy people harbour the bacteria in a latent or dormant form, it seemed only those who were susceptible went on to develop the disease.



Hermon-Taylor wanted to find a cure for Crohn's disease

AMY HERMON-TAYLOR

Armed with this new knowledge, Hermon-Taylor started trialling treatment of patients with Crohn's disease with antibiotics to target MAP and was astonished to find some made remarkable recoveries; seeing these transformations convinced him that MAP was the cause of Crohn's disease.

Hunt for a vaccine

Unfortunately, antibiotics had their drawbacks and were not always effective. Hermon-Taylor proposed a new idea for a treatment: a therapeutic vaccine against MAP, essentially a form of immunotherapy designed to teach the body's immune system to recognise and destroy MAP infected cells. His hope was that by eradicating MAP, he could cure the disease. In collaboration with Tim Bull at St George's and Sarah Gilbert at Oxford University, he designed and developed the vaccine and spent the rest of his life bringing it through clinical trials. Fortuitously, a few weeks before his death, Hermon-Taylor heard that the first patient with Crohn's disease had received his vaccine in a landmark clinical trial carried out at Guy's and St Thomas' hospitals.

Gilbert recalled, "When I first met John he told me that he was frustrated by having to 'cut people's bottoms out' to deal with Crohn's. He was passionate about developing a therapeutic vaccine which could treat the disease and established many collaborations to further this aim. Early clinical trials showed the ability of the vaccine to induce immune responses against MAP, but more work is required to establish any therapeutic effect."

Hermon-Taylor remained at St George's until he retired from surgery in 2002 to devote himself full time to his research. In 2008 he moved to King's College London, as a visiting professor for gastrointestinal research, where he worked until his final illness.

His colleague, Gaurav Agrawal, gastroenterologist and honorary fellow, King's College London, recalled, "John fundamentally changed medicine, agriculture, and veterinary medicine for the better. He enticed me back from Australia to join his research team and for the Crohn's MAP vaccine trial. He created this with Oxford, a decade before they created the covid vaccine based on this technology. We have vaccinated seven patients so far. The most remarkable aspect was that John was correct on how MAP causes the pathogenesis in Crohn's."

Hermon-Taylor leaves his two children.

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