comment

"I've seen no credible evidence of Johnson's assertion on care homes" **DAVID OLIVER**"How ready should I be to refer for a second opinion?" **HELEN SALISBURY PLUS** Positive side of Trump's buyout of remdesivir; end the trial of late rotas

CRITICAL THINKING Matt Morgan

Patients' notes should be addressed to them

orking in intensive care, I'm spared the pain (or joy) of writing clinic letters. In fact, most of the writing I do in my work is communication between healthcare professionals rather than directly with patients or families. However, as with so many things, covid-19 has changed this.

Relatives have often been unable to visit even critically ill loved ones during the pandemic. As a result, the memories of tough conversations that I normally carry around with me have morphed from the distressed faces of family members into the rubber keys on my office phone. This collection of numbers is the first and last thing I see when breaking bad news. Then I document these tough conversations in writing, often starting with something like, "Today I spoke with this patient's wife and told her that sadly her husband was critically ill. I told her that he was so sick he might die."

A BMJ Opinion piece published in 2018 argued that clinic letters should be written "to" patients, not "about" them. I think that the same should be true of our medical notes. When we put patients at the centre of all that we do—be it shared decision making or best interest decisions, or even simply holding their hand when families cannot do so—it seems odd that the perpetual record of that care should exclude them.

Instead, we should perhaps flip the narrative—or, rather, return to what such communication should be all about. I went back and rewrote that entry in the patient's notes. It now reads, "Hi Davide, today I spoke to your wife, and I could hear your young daughter babbling in the background. I explained that you were critically ill, and I was worried that you were so sick you might die."

Subtle changes in language can be powerful. Although these changes may mean little in a biomedical or legal setting, I suspect that they could have an impact on numerous areas of

medicine where we would least expect it. For example, patient diaries in some acute care settings may be helpful for patients and their families to read after their crisis is over. Such a diary is effectively a biography, where an autobiography is not possible—so, who better to address it to than the main protagonist without a voice?

The biography above had a happy ending, or at least a new beginning. A few weeks later I was able to write this, "I spoke with your wife again today. I was so pleased to tell her that you were better, you were off the life support machine, and your daughter will soon have her daddy back."





PERSONAL VIEW James M Brophy

The back of the remdesivir queue may be the best place

The Trump administration's monopolisation of the drug for covid-19 may turn out to be good news for the rest of the world

n 30 June, the *Guardian* ran an article with the headline "US secures world stock of key covid-19 drug remdesivir," lamenting the monopolisation for "the next three months of one of the two drugs proven to work against covid-19, leaving none for the UK, Europe, or most of the rest of the world." This "me first" attitude should surprise nobody familiar with the current US administration's attitude towards anything involving international collaboration—such as its stance on climate change, the World Health Organization, trade, and immigration.

Paradoxically, the remdesivir story may actually be good news for the rest of the world. The evidence for remdesivir's clinical benefit is provided by a randomised controlled trial of 1063 patients published in the *New England Journal of Medicine*. It shows a shortened median time to recovery in the remdesivir group, compared with 15 days in the placebo group. There was no effect on mortality. Moreover, there are many reasons why the shortened reported time to symptomatic recovery may be an overestimate.

First, let's recall some basic principles of controlled trials. It's been established that company sponsored trials, prematurely stopped trials, poorly executed trials with unsuccessful blinding, and large lost to follow-up trials all contribute to exaggerated, embellished, and unreliable effect measures. This remdesivir study was company sponsored, prematurely stopped, had incomplete blinding, and only about 15% of patients had their outcome determined at the specified primary endpoint of 28 days.

Are we still convinced?

An additional concern is the modification of the primary trial endpoint shortly before publication, although apparently before unblinding of any results. By contrast, a non-company sponsored trial looking at the same remdesivir doses found no benefit for either symptom duration or mortality. Are we still convinced about the magnitude of any potential benefit?

Obviously, in a pandemic there is a strong push to quickly find efficacious treatments, but this becomes increasingly difficult when results are first presented in press conferences and preprints. Moreover, we must be aware of associated cognitive biases that can influence the clarity of our decision making. For example, when the leading US coronavirus expert describes the study as showing "a clear



For this marginal and uncertain benefit, the manufacturer proposes charging around £2400 a treatment

cut, significant, positive effect in diminishing the time to recovery" the stage is set for optimism, confirmation, and group think biases that can impede an objective, critical, and comprehensive assessment of the totality of the evidence. These biases are exemplified in a quote in the *Guardian* article from Andrew Hill, senior visiting research fellow at Liverpool University, stating, "Remdesivir would get people out of hospital more quickly, reducing the burden on the NHS, and might improve survival," and, "Once again we're at the back of the queue."

I would argue that in this case, it is good to be at the back of the queue. It's worth repeating that no remdesivir study has demonstrated any reduction in hospital stay or mortality. Even ignoring the uncertainty about the magnitude of any reduction in symptomatic recovery time, it is far from obvious that reductions in length of hospital stay would follow. Most patients in hospital with covid-19 are older with multiple comorbidities and often are frail with limited social support systems that may lead to a

BMJ OPINION Rammina Yassaie

Stop infantilising doctors and send rotas out on time



During the covid-19 crisis, the NHS has stepped up to the plate. Many junior doctors, for example, accepted being redeployed with no quibbles. Meanwhile, training has largely been neglected and family lives upheaved.

While I would expect no less from my colleagues at a time of national crisis, I would hope that the relevant organisations would recognise this hard work and reciprocate with a change that has long been needed—sending doctors their rotas on time.

Rota angst is a well known phenomenon among medics. The absence of a timely rota leads to anxiety about the organisation of things like childcare. It also leads to worries about being unable to attend important personal and professional events, such as weddings and conferences.

Receiving a rota in a timely manner has such a profound effect on morale

While there have been improvements to national guidance on rostering, the problem remains endemic in many hospital trusts. As a result, many junior doctors have entered a state of learned helplessness—they believe they lack control over the scheduling of the next weeks to months of their lives.

As someone who is 10 years into my career as a doctor I still feel the dread every six months, waiting for my rota with little time to coordinate childcare with my medic partner.

It has become even more difficult during the pandemic because we are unable to call grandparents for support at short notice. As I approach my 34th birthday I feel utterly

106 18 July 2020 | the **bmj**



prolongation of hospital stay beyond the duration of their infectious symptoms.

For this marginal and uncertain benefit, the manufacturer now proposes charging around \$3000 (£2400) a treatment. Remdesivir's history may also provoke additional reservations since its investigation as a treatment for other viral diseases, including hepatitis C and Ebola, has not demonstrated clinical success. Also, the last time countries stockpiled antivirals—at least \$10bn for oseltamivir (Tamiflu)—could hardly be considered a success as it was eventually removed from WHO's list of essential drugs.

Yes, the US action is truly the apotheosis of a self-centred nation, but it is potentially beneficial for other countries. Better to have the American healthcare system dominate the market and spend \$1.5bn for such uncertain benefits. The money other countries save can surely be better spent on further research for this and other drugs as well as for public health measures, including testing, contact tracing, and maintaining universal healthcare, all notable lacunae in the US system.

James M Brophy, professor of medicine and epidemiology, McGill University Health Center, Montreal james.brophy@mcgill.ca
Cite this as: BMJ 2020;370:m2797

exhausted by the process and increasingly aware of how infantilising it is.

Recruitment and retention in medicine are already under great strain. Furthermore, the number of junior doctors going straight from foundation to specialty training has recently been found to be at its lowest level yet.

It is no wonder that staffing shortages are rife. Of the doctors that have left the profession or emigrated, many have cited rota scheduling as a key reason for leaving.

Receiving a rota in a timely manner has such a profound effect on morale. If we want to ensure we can recruit and retain sufficient numbers of doctors for any further infection peaks or future pandemics, we need to get these simple things right.

Rammina Yassaie, GP trainee, Yorkshire

ACUTE PERSPECTIVE David Oliver

Was the PM right about care homes?

n 6 July the prime minister, Boris Johnson, told journalists that "too many care homes didn't really follow procedures" during the covid-19 pandemic, arguably implying that this fuelled the spread of the virus.

On 7 July the health secretary, Matt Hancock, refused to apologise and claimed that "the PM was explaining that because asymptomatic transmission was not known about, the correct procedures were therefore not known." Was there any substance to Johnson's inflammatory remarks?

The Office for National Statistics (ONS) reported 19 394 covid-19 related deaths of care home residents in England and Wales from 2 March to 12 June—29.3% of all deaths of care home residents in that period. And 56% of care homes in England had reported at least one covid-19 case.

In March and April the government and arm's length organisations actively urged the transfer of patients from hospital to care homes and explicitly said prior testing for covid-19 was not required. The Coronavirus Act also gave new permissions for speedier assessment, and extra "emergency coronavirus funds" were made available to help protect acute hospital beds. Not until 15 April were guidelines updated to require testing before transfer. These were the official "correct procedures" from Johnson's own government.

Nobody would argue that practice in 11 400 care homes run by 5000 providers in England could be uniformly perfect.

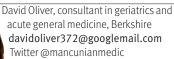
I've chatted off the record with senior people from the sector

It's no wonder the money that came with hospital transfers proved hard to resist who acknowledge that care homes' ability to follow new guidelines have been variable and affected by leadership, training, and staffing. Some homes have been more assertive than others in refusing to take residents from hospital without a negative test. I've also seen data (as yet unpublished) on the high prevalence of asymptomatic infection among residents and staff.

But I've seen no credible evidence of Johnson's assertion that correct procedures were not followed. And care homes suffered a woeful shortage of PPE and no access to testing. In May some local authorities were reported to have pressured care homes into accepting hospital transfers, threatening to withhold funding or equipment.

Before the pandemic many care homes struggled to remain viable, as maximum fees from local authorities didn't cover care costs and "self-funding" residents paid higher rates and effectively cross subsidised council funded ones. It's no wonder the "uplift money" that came with accepting new residents or transfers from hospitals proved hard to resist for some.

The ONS found that care homes with high use of agency staff, especially those working across many sites, had more outbreaks and deaths. Those that didn't provide sick pay had higher rates still. The care home sector isn't blameless, but the PM must realise its predicament results partly from decisions made over the past



Cite this as: *BMJ* 2020;370:m2741

decade by the party he leads.



Whose side are you on?

very week in our clinical meeting we discuss any complaints or compliments received at the practice and consider what we could do better. There is often a mismatch between our own perceptions of what went well and those of patients; sometimes the most effusive praise and angriest complaints are equally surprising, arising from what seem to be unremarkable encounters or events.

GPs are not the official channel for complaints about hospital treatment, but nevertheless we also hear many reactions to care received elsewhere, ranging from delight and gratitude to grief and anger. When I listen to accounts of consultations that went badly I try to support my patient while being conscious I am only hearing one side of the story. To be fair to my hospital colleagues, I must remember there may be relevant facts I don't know, and sometimes what a patient hears is not exactly what was said. I am not questioning my patients' distress or veracity but should be slow to judge.

My own expertise, or lack of it, also comes into the mix. My consultant colleagues are likely to be much better informed about risks and research in their field and much more able to judge the safety and effectiveness of techniques and devices they use. In turn, they rely on the work of regulators whose job it is to make sure medicines and devices are safe, adequately tested, and fit for purpose. In the case of

Is my balance right between professional solidarity and being an advocate for patients?

vaginal mesh, despite alarm bells being rung in 2008 by the US Food and Drug Administration, it took 10 years before guidance was issued in the UK to limit its use. Some of this delay is likely to have resulted from conflicts of interest.

The Cumberlege report on avoidable harms caused by pelvic mesh implants, hormone pregnancy tests, and sodium valproate in pregnancy was published last week. It described a healthcare system that is "disjointed, siloed, unresponsive and defensive," a system that failed to listen to patients' concerns. One of the report's recommendations to reduce the risk of similar harms in the future is that the GMC publish a list of every clinician's financial and non-pecuniary interests. This seems entirely sensible, and I hope to see it enacted soon.

Reading the report makes me think again about how I respond to patients who are not satisfied with their hospital care. Have I got the balance right between professional solidarity and being an advocate for my patients? When the specialist's view is that there is nothing more that can be done, how ready should I be to refer for a second opinion? I need to weigh up my responsibility to steward scarce resources with the patient's need

for answers and the best care.

Helen Salisbury, GP, Oxford helen.salisbury@phc.ox.ac.uk Twitter @HelenRSalisbury Cite this as: BMJ 2020;370:m2821

LATEST PODCASTS



America's search for a covid-19 vaccine

President Trump introduced a programme called Operation Warp Speed back in May, which has been tasked with finding a vaccine for coronavirus. This podcast hears from three experts about its prospects for success. Here Nicole Lurie, a senior lecturer at Harvard Medical School, talks about whether there could be a vaccine ready for use in the US by the end of the year:

"A lot has been talked about in terms of a premature authorisation or a premature licensure. Almost all of us feel very strongly that the vaccine has to be shown to be quite safe and likely effective before we would feel comfortable with that kind of release. But the reality is there probably will be a couple of million doses as a byproduct of development. It may well be that Trump decides to declare victory, or it may well be that the scientific community prevails and gets to hold off until we have more confidence in the vaccine. Time will tell."

How to say no

Many healthcare professionals are stretching themselves to provide care right now, but there may be instances when you need to say no. How can doctors learn when to do this and how? To find out, this Wellbeing podcast hears from Kate Burnett, a urologist and coach who educates NHS staff on empowerment:

"Often, healthcare workers take a rescuer position. You have to slow the world down and think in this moment when I'm offering my help, has this help been asked for or am I offering it. So that's the first thing to do. And then I have to be absolutely open and honest. What is my intent and is the intent here to serve my own need, my own ego? Or is what I'm doing actually helpful?"



Listen and subscribe to *The BMJ* podcast on Apple Podcasts, Spotify, and other major podcast apps

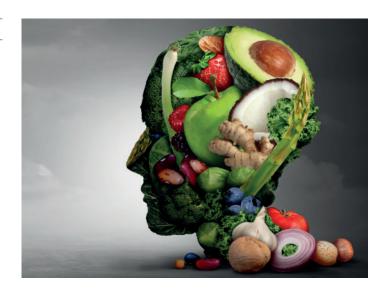
Edited by Kelly Brendel, deputy digital content editor, The BMJ

ANALYSIS

Food and mood: how do diet and nutrition affect mental wellbeing?

Improving people's eating patterns may help to protect not only the physical health but also the mental health of the population, say

Joseph Firth and colleagues



epression and anxiety are the most common mental health conditions worldwide, making them a leading cause of disability. Even beyond diagnosed conditions, subclinical symptoms of depression and anxiety affect the wellbeing and functioning of a large proportion of the population. Therefore, new approaches to managing both clinically diagnosed and subclinical depression and anxiety are needed.

In recent years, the relations between nutrition and mental health have gained considerable interest. Indeed, epidemiological research has observed that adherence to healthy or Mediterranean dietary patterns—high consumption of fruits, vegetables, nuts, and legumes; moderate consumption of poultry, eggs, and dairy products; and only occasional consumption of red meat—is associated with a reduced risk of depression.³ However, the nature of these relations is complicated by the clear potential for reverse causality between diet

Data from longitudinal research show an association between progressively higher dietary glycaemic index and the incidence of depressive symptoms

and mental health (figure). For example, alterations in food choices or preferences in response to our temporary psychological state—such as "comfort foods" in times of low mood, or changes in appetite from stress—are common human experiences. In addition, relations between nutrition and longstanding mental illness are compounded by barriers to maintaining a healthy diet. These barriers disproportionality affect people with mental illness and include the financial and environmental determinants of health, and even the appetite inducing effects of psychiatric medications. ⁴

While acknowledging the complex, multidirectional nature of the relations between diet and mental health (figure), in this article we focus on the ways in which certain foods and dietary patterns could affect mental health.

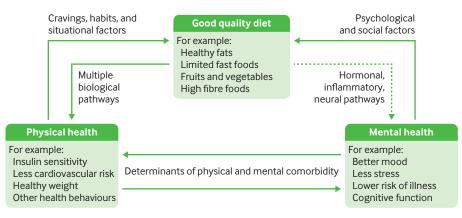
Mood and carbohydrates

Consumption of highly refined carbohydrates can increase the risk of obesity and diabetes.5 Glycaemic index is a relative ranking of carbohydrate in foods according to the speed at which they are digested, absorbed, metabolised, and ultimately affect blood glucose and insulin levels. As well as the physical health risks, diets with a high glycaemic index and load (eg, diets containing high amounts of refined carbohydrates and sugars) may also have a detrimental effect on psychological wellbeing; data from longitudinal research show an association between progressively higher dietary glycaemic index and the incidence of depressive symptoms.6

Clinical studies have also shown potential causal effects of refined carbohydrates on mood; experimental exposure to diets with a high glycaemic load in controlled settings increases depressive symptoms in healthy volunteers, with a moderately large effect.⁷

KEY MESSAGES

- Healthy eating patterns, such as the Mediterranean diet, are associated with better mental health than "unhealthy" eating patterns, such as the Western diet
- The effects of certain foods or dietary patterns on glycaemia, immune activation, and the gut microbiome may play a role in the relations between food and mood
- More research is needed to understand the mechanisms that link food and mental wellbeing and determine how and when nutrition can be used to improve mental health



Hypothesised relation between diet, physical health, and mental health. The broken line is the focus of this article

the**bmj** | 18 July 2020 **109**

Although mood itself can affect our food choices, plausible mechanisms exist by which high consumption of processed carbohydrates could increase the risk of depression and anxiety—for example, through repeated and rapid increases and decreases in blood glucose. Measures of glycaemic index and glycaemic load can be used to estimate glycaemia and insulin demand in healthy individuals after eating.8 Thus, high dietary glycaemic load, and the resultant compensatory responses, could lower plasma glucose to concentrations that trigger the secretion of autonomic counter-regulatory hormones such as cortisol, adrenaline, growth hormone, and glucagon. 59 The potential effects of this response on mood have been examined in experimental human research of stepped reductions in plasma glucose concentrations conducted under laboratory conditions through glucose perfusion. These findings showed that such counterregulatory hormones may cause changes in anxiety, irritability, and hunger. 10 In addition, observational research has found that recurrent hypoglycaemia (low blood sugar) is associated with mood disorders.9

The hypothesis that repeated and rapid increases and decreases in blood glucose explain how consumption of refined carbohydrate could affect psychological state appears to be a good fit given the relatively fast effect of diets with a high glycaemic index or load on depressive symptoms observed in human studies. However, other processes may explain the observed relations. For instance, diets with a high glycaemic index are a risk factor for diabetes, which is often a comorbid condition with depression.

While the main models of disease pathophysiology in diabetes and mental illness are separate, common abnormalities in insulin resistance, brain volume, and neurocognitive performance in both conditions support the hypothesis that these conditions have overlapping pathophysiology. ¹² Furthermore, the inflammatory response to foods with a high glycaemic index ¹³ raises the possibility that diets with a high glycaemic index are associated with symptoms of depression through the broader connections between mental health and immune activation.

Major depressive disorder in humans is associated with alterations of the gut microbiome

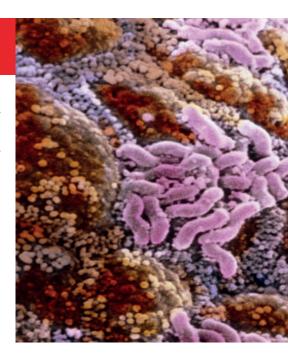
Diet, immune activation, and depression

Studies have found that sustained adherence to Mediterranean dietary patterns can reduce markers of inflammation in humans. ¹⁴ On the other hand, high calorie meals rich in saturated fat appear to stimulate immune activation. ^{13 15} Indeed, the inflammatory effects of a diet high in calories and saturated fat have been proposed as one mechanism through which the Western diet may have detrimental effects on brain health, including cognitive decline, hippocampal dysfunction, and damage to the blood-brain barrier. ¹⁵

Since various mental health conditions, including mood disorders, have been linked to heightened inflammation, 16 this mechanism also presents a pathway through which poor diet could increase the risk of depression. This hypothesis is supported by observational studies which have shown that people with depression score significantly higher on measures of "dietary inflammation," 317 characterised by a greater consumption of foods that are associated with inflammation (eg, trans fats and refined carbohydrates) and lower intakes of nutritional foods, which are thought to have anti-inflammatory properties (eg, omega-3 fats). However, the causal roles of dietary inflammation in mental health have not yet been established.

Nonetheless, randomised controlled trials of anti-inflammatory agents (eg, cytokine inhibitors and non-steroidal antiinflammatory drugs) have found that these agents can significantly reduce depressive symptoms. 18 Specific nutritional components (eg, polyphenols and polyunsaturated fats) and general dietary patterns (eg, consumption of a Mediterranean diet) may also have anti-inflammatory effects, $^{14-20}$ which raises the possibility that certain foods could relieve or prevent depressive symptoms associated with heightened inflammatory status.²¹ A recent study provides preliminary support for this possibility. 20 The study shows that medications that stimulate inflammation typically induce depressive states in people treated, and that giving omega-3 fatty acids, which have anti-inflammatory properties, before the medication seems to prevent the onset of cytokine induced depression.²⁰

However, the complexity of the hypothesised three way relation between diet, inflammation, and depression is compounded by several important modifiers. For example, recent clinical research has observed that stressors experienced the previous day, or a personal history of major



depressive disorders, may cancel out the beneficial effects of healthy food choices on inflammation and mood.²² Furthermore, as heightened inflammation occurs in only some clinically depressed individuals, anti-inflammatory interventions may only benefit certain people characterised by an "inflammatory phenotype," or those with comorbid inflammatory conditions.¹⁸

Further interventional research is needed to establish if improvements in immune regulation, induced by diet, can reduce depressive symptoms in those affected by inflammatory conditions.

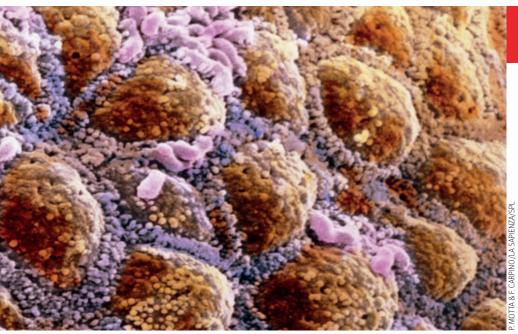
Brain, gut microbiome, and mood

A more recent explanation for the way in which our food may affect our mental wellbeing is the effect of dietary patterns on the gut microbiome—a broad term that refers to the trillions of microbial organisms, including bacteria, viruses, and archaea, living in the human gut. The gut microbiome interacts with the brain in bidirectional ways using neural, inflammatory, and hormonal signalling pathways.²³

The role of altered interactions between the brain and gut microbiome on mental health has been proposed on the basis of the following evidence: emotion-like behaviour in rodents changes with changes in the gut microbiome, ²⁴ major depressive disorder in humans is associated with alterations of the gut microbiome, ²⁵ and transfer of faecal gut microbiota from humans with depression into rodents appears to induce animal behaviours that are hypothesised to indicate depression-like states. ²⁵ ²⁶ Such findings suggest a role of altered neuroactive microbial metabolites in depressive symptoms.

In addition to genetic factors and exposure to antibiotics, diet is a potentially

110 18 July 2020 | the **bmj**



modifiable determinant of the diversity, relative abundance, and functionality of the gut microbiome throughout life. For instance, the neurocognitive effects of the Western diet, and the possible mediating role of low grade systemic immune activation (as discussed above) may result from a compromised mucus layer with or without increased epithelial permeability. Such a decrease in the function of the gut barrier is sometimes referred to as a "leaky gut" and has been linked to an "unhealthy" gut microbiome resulting from a diet low in fibre and high in saturated fats, refined sugars, and artificial sweeteners. ¹⁵⁻²⁷

Conversely, the consumption of a diet high in fibres, polyphenols, and unsaturated fatty acids (as found in a Mediterranean diet) can promote gut microbial taxa which can metabolise these food sources into anti-inflammatory metabolites, ^{15 28} such as short chain fatty acids, while lowering the production of secondary bile acids and p-cresol.

Moreover, a recent study found that the ingestion of probiotics by healthy individuals, which theoretically target the gut microbiome, can alter the brain's response to a task that requires emotional attention²⁹ and may even reduce symptoms of depression.³⁰

When viewed together, these studies provide promising evidence supporting a role of the gut microbiome in modulating processes that regulate emotion in the human brain. However, no causal relation between specific microbes, or their metabolites, and complex human emotions has been established so far.

Furthermore, whether changes to the gut microbiome induced by diet can affect depressive symptoms or clinical depressive disorders, and the time in which this could feasibly occur, remains to be shown.

Priorities and next steps

In moving forward within this active field of research, it is firstly important not to lose sight of the wood for the trees—that is, become too focused on the details and not pay attention to the bigger questions.

Whereas discovering the antiinflammatory properties of a single nutrient or uncovering the subtleties of interactions between the gut and the brain may shed new light on how food may influence mood, it is important not to neglect the existing knowledge on other ways diet may affect mental health. For example, the later consequences of a poor diet include obesity and diabetes, which have already been shown to be associated with poorer mental health. 11-33 A full discussion of the effect of these comorbidities is beyond the scope of our article (see figure, p 109), but it is important to acknowledge that developing public health initiatives that effectively tackle the established risk factors of physical and mental comorbidities is a priority for improving population health.

Further work is needed to improve our understanding of the complex pathways through which diet and nutrition can influence the brain. Such knowledge could lead to investigations of targeted, even personalised, interventions to improve mood, anxiety, or other symptoms through nutritional approaches. However, these possibilities are speculative at the moment, and more interventional research is needed to establish if, how, and when dietary interventions can be used to prevent mental illness or reduce symptoms in those living with such conditions.

Of note, a recent large clinical trial found no significant benefits of a behavioural intervention promoting a Mediterranean diet for adults with subclinical depressive

Increased understanding should not be used to support stigmatisation of an individual's dietary choices

symptoms.³⁴ On the other hand, several recent smaller trials in individuals with current depression observed moderately large improvements from interventions based on the Mediterranean diet.³⁵⁻³⁷ Such results, however, must be considered within the context of the effect of people's expectations, particularly given that individuals' beliefs about the quality of their food or diet may also have a marked effect on their sense of overall health and wellbeing.³⁸

Nonetheless, even aside from psychological effects, consideration of dietary factors within mental healthcare may help improve physical health outcomes, given the higher rates of cardiometabolic diseases observed in people with mental illness.³³

At the same time, it is important to remember that the causes of mental illness are many and varied, and they will often present and persist independently of nutrition and diet. Thus, the increased understanding of potential connections between food and mental wellbeing should never be used to support automatic assumptions, or stigmatisation, about an individual's dietary choices and their mental health. Indeed, such stigmatisation could be itself be a causal pathway to increasing the risk of poorer mental health.

Nonetheless, a promising message for public health and clinical settings is emerging. This message supports the idea that creating environments and developing measures that promote healthy, nutritious diets, while decreasing the consumption of highly processed and refined "junk" foods may provide benefits even beyond the well known effects on physical health, including improved psychological wellbeing.

Joseph Firth, research fellow, University of Manchester joseph.firth@manchester.ac.uk

James E Gangwisch, assistant professor, University Vagelos College of Physicians and Surgeons, New York

Alessandra Borisini, researcher, King's College London Robyn E Wootton, researcher, University of Bristol Emeran A Mayer, professor, UCLA, Los Angeles Cite this as: BMJ 2020;369:m2382

FOOD FOR THOUGHT 2020

This article is part of our Food for thought 2020 collection, which looks at the science and politics of nutrition. All the articles in the collection are available at www.bmj.com/Food4Thought20

the **bmj** | 18 July 2020

LETTERS Selected from rapid responses on bmj.com

LETTER OF THE WEEK

Decolonising the NHS

We agree with the editor's comments around racism. But, although migration, ethnicity, and race have unique issues, the three are intrinsically linked. The overlap between racism and migration is particularly pertinent when discussing colonialism.

The NHS's complicity in the "hostile environment" is just one example of how the UK continues to benefit from its colonial past. Looking at the list of NHS staff in England from outside the European Union—Indian (25 809), Filipino (22 043), Nigerian (8241), Pakistani (4313), Zimbabwe (4192), Ghana (2863)—it's easy to see that the ties with former colonies are still strong. Healthcare professionals are often actively recruited to work in the NHS from these countries, thus strengthening our

thebmi

Covid-19 and ethnicity: a failure to learn

country's health system while diminishing others. The UK benefits from a greater number of health professionals per head of the population than most of its former colonies and boasts an average life expectancy of around 80 years. Meanwhile, in Nigeria that figure is only 53 years and in India, 67. But despite perpetuating these inequalities, when patients from these countries seek healthcare in the UK they are charged either through the

health surcharge or at the inflated rate of 150% cost of the treatment they seek. An unpublished analysis has found that patients from former British colonies make up a substantial proportion of those charged.

These policies extend from causing harm to migrants to also being harmful to British foreign born nationals, as well as to the British black, Asian, and ethnic minority communities, as was exposed by the Windrush scandal. This was not an accident: the Department of Health acknowledged these risks in 2015 in its equality assessment. Despite this, little action was taken to protect these groups, making them collateral damage in the pursuit of ever more aggressive immigration policies.

Joanna Dobbin, academic clinical fellow in primary care and population health; Rahma Abdi, GP registrar, London

Cite this as: *BMJ* 2020;370:m2719

RACISM: THE OTHER PANDEMIC

Godlee says that "racism is a public health issue because it kills people" (Editor's Choice, 13 June). Lack of diversity in teaching at UK medical schools, mirrored by medical textbooks, perpetuates racial inequality.

Most clinical images and case presentations show only white patients. Reflecting on this, I felt unsure how I would identify features such as cyanosis, erythema, and pallor in patients with different skin colours. An American study found that the skin tones in leading textbooks were 74.5% light, 21% medium, and 4.5% dark, compared with a distribution of 62.5% white, 20.4% black, and 17.0% person of colour in the US population.

Failure to educate medical students in the variety of presentations and clinical signs seen in all ethnicities leads to increased morbidity and mortality in the BAME population. Representation is vital for doctors to provide the same high level of care to all patients, reflecting the principle of justice in medical ethics.

Cameron A Lynch, fourth year medical student, Manchester

Cite this as: BMJ 2020;370:m2745

STOP RACISM TO STOP COVID-19

Let's speak up and speak out

We agree that "there is much work to be done" to stop racism (Personal View 13 June). We need to create a workforce that is educated and reflective about racism and its detrimental effects.

Repeatedly asking BAME medical students and doctors to tell their stories not only retraumatises but delays and may prevent finding solutions. These experiences are widely shared, known, and

understood. Instead let's take action.

Let's educate future physicians. Let's talk about racism and empower students to tackle it. Let's teach how racism can affect health and wellbeing and what we can do to root it out.

We have co-created bystander intervention training, to enable individuals to recognise and call out intentional and unintentional racist behaviour and microaggressions. The training encourages bystander peers and tutors to implement a united front and shared accountability.

We hope other medical schools will follow our lead. Let's promote and foster allyship among our white colleagues. Let's have a medical workforce that is committed to equality for all. Let's speak up and speak out.

Joanna Semlyen, senior lecturer in psychology and medical education and lead for diversity and inclusion; Bhairavi Hariharan, year 4 medical student; Benz Josiah, graduate; Kaobi Okongwu, graduate; Louisa Sowah, Quarshie year 4 medical student; Veena Rodrigues, professor of public health and medical education and deputy dean, Norwich Medical School

Cite this as: BMJ 2020;370:m2746

ETHNICITY AND COVID-19

Working locally to reduce inequalities

Public Health England failed to recommend clear actions to tackle ethnic inequality in health outcomes, including those for covid-19 (Editorial, 13 June). But we don't need to wait for a public health response—we already have a wealth of evidence. Clinical commissioning groups and primary care should be at the forefront of this—that's what the NHS was set up for.

The quality of primary care data on ethnicity might be patchy nationally, but local health issues can be identified and acted on. We have been working with local people with severe mental illness—a group with an overrepresentation of people from BAME backgrounds—and adapting services to meet their needs.

Clinical commissioning groups and NHS England need to prioritise reducing health inequalities of BAME groups and tackling the institutional racism that might be hampering progress.

Rhiannon England, GP mental health lead, City and Hackney Clinical Commissioning Group

Cite this as: *BMJ* 2020;370:m2748

112 18 July 2020 | the **bmj**

COVID-19: EXCESS MORTALITY

Domiciliary care has been neglected

Piccininni and colleagues show the importance of using excess all cause mortality to measure the impact of covid-19 (Research, 6 June). This approach has revealed the rates of covid-19 deaths in care homes. The rise in deaths among those receiving domiciliary care is similar to that in care homes but is scarcely mentioned.

Nearly 900 000 people received domiciliary care in the UK in 2014-15. Recipients are at higher risk of covid-19 owing to age, underlying health problems, and the way care is provided. Care workers might visit many clients daily, and clients might receive care from several workers.

A quarter of the domiciliary care workforce are 55 or older and 23% are BAME. Care workers cannot maintain social distancing from vulnerable clients, putting themselves at risk. About 9400 agencies provide domiciliary care, and other care workers are contracted individually, making access to PPE and testing challenging. The importance of this sector must be recognised.

Judith R Glynn, professor of infectious disease epidemiology; Katherine Fielding, professor in medical statistics and epidemiology; Tom Shakespeare, professor of disability research; Oona Campbell, professor of epidemiology and reproductive health, London

Cite this as: BMJ 2020;370:m2751

PANDEMIC ETHICAL ROAD MAP

Clinicians need CPD in ethics

The call for an ethical road map is timely given the explosion of ethical statements of variable quality, bias, and obscure provenance during the covid-19 pandemic (Editorial, 13 June). A missing element is ongoing continuous professional development (CPD) in ethics.

The Irish Department of Health published two documents on ethical frameworks for covid-19 with no attributions of authorship or consultation and no appreciable reference list. These documents contained contentious elements, including supporting life years saved in prioritising medical care. The lack of commentary or expression of concern from Irish postgraduate medical colleges and professional healthcare bodies is a measure of the ethical inarticulacy of clinicians as a group.

If doctors do not develop articulacy in ethics through CPD, they risk becoming unequal partners in developing appropriate ethical frameworks for optimal care of patients and fostering due congruence between ethics and clinical practice.

Desmond J O'Neill, professor of geriatric medicine, Dublin

Cite this as: BMJ 2020;370:m2793



RISK OF COVID-19 RESURGENCE

Predicting second waves locally

The debate on how to use mathematical simulations to predict the impact of covid-19 is ongoing (This week, 13 June).

A cultural gap exists between the worlds of simulation and of public health surveillance. Surveillance consists of transforming health related data into useful information for decision makers. Scientists modelling predictions, unless active in applied public health, might not be trained to do that. Policy makers struggle to understand the strengths and limitations of prediction models.

I propose simulation at a local scale—at the level of hospital or healthcare facilities in a jurisdiction. The key is to put data scientists, healthcare providers, and policy makers in the same room. One advantage is that models are built accounting for the true needs of the healthcare system, based on real data. Further, the predictions can be directly discussed with policy makers and adapted as needed, increasing the probability of having an impact on decisions.

Arnaud Chiolero, epidemiologist and professor of public health, Fribourg

Cite this as: BMJ 2020;370:m2731

ANTIMICROBIAL RESISTANCE

Disinfectants are changing microbiomes

The acceleration of antimicrobial resistance in covid-19 is alarming (Feature, 13 June). Fortunately, tools exist for studying emergence and spread of antibiotic resistance.

Another concern is the effect of the large scale use of disinfectants and sanitisers on the microbiomes of ecological niches in humans, animals, and environments. Dysbiosis in host-commensal interactions is a likely outcome, affecting the host's immune functioning, metabolism, physiological parameters, and susceptibility to disease. Probiotics, immunobiotics, and synbiotics are promising correctives.

But the problems extend beyond dysbiosis—for example, emergence of alcohol resistance in *Enterococcus faecium* has been

SOCIOECONOMICS AND COVID-19

Covid-19, Brexit, and climate change

Anderson and colleagues discuss the need to mitigate the longer term effects of the covid-19 pandemic in an equitable way (Analysis, 13 June). The UK needs to tackle the triple public health challenge of covid-19, climate change, and Brexit.

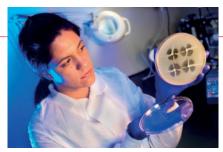
Public Health Wales has used health impact assessment to examine Brexit, climate change, and aspects of the pandemic. Our work shows that poverty, inequalities, and other social determinants increase vulnerability to harms from each. Poor mental wellbeing, intergenerational or social conflict, and the need for community resilience are also consistent themes.

Rather than returning to our inequitable, unsustainable systems, new balances must be found between health protection, improvement, and healthcare; between health eroding and health generating businesses; and between global commerce and planetary health. Our efforts must protect the most economically, physically, and mentally vulnerable people.

These challenges move across borders, so if any nation leaves communities vulnerable, everyone will experience the consequences.

Liz Green, programme director for health impact assessment; Sara Wood, public health researcher; Mark A Bellis, director and professor of public health, WHO Collaborating Centre on Investment for Health and Well-being

Cite this as: BMJ 2020;370:m2798



reported. By using disinfectants, sanitisers, and antibiotics for containment of covid-19, we are causing immeasurable collateral damage to microbiomes.

We need to use the available tools and technologies and develop new ones that allow assessment of damage to microbial ecosystems, closely examine human-animal-microbial relationships, enable forecasting of newer threats, and reveal checkpoints to contain such threats.

Ajit Singh, emeritus scientist (ICAR) and former professor, Hisar, India

Cite this as: *BMJ* 2020;370:m2795

the**bmj** | 18 July 2020 **113**

OBITUARIES

Andrew Veitch Foote

Consultant cardiothoracic surgeon Aberdeen Royal Infirmary, Foresterhill, Aberdeen (b 1929; q Edinburgh 1951; ChM, FRCSEd), died from covid-19 on 9 May 2020



Andrew Veitch Foote entered surgical training in Yorkshire before moving to Edinburgh as registrar in cardiothoracic surgery. In 1963 he was appointed as lecturer in general surgery to the university department of surgery in Aberdeen and later became senior lecturer and consultant. In 1972 he followed his original interest and subspecialised in cardiothoracic surgery. After further training in Toronto and at the Cleveland Clinic, he returned to the UK and initiated the era of open heart surgery at Aberdeen. Andrew was an accomplished golfer, woodcarver, and bridge player, as well as a doughty opponent at the snooker table. He died in Cape Town and leaves his wife, sister, and daughter.

George G Youngson, J Nelson Norman Cite this as: *BMJ* 2020;369:m2157

Colin Ralston Paterson

Reader in medicine and consultant physician (b 1936; q Oxford 1962; MA, DM, MSc, FRCPath), died from a myocardial infarction on 30 March 2020



Born in Manchester,

Colin Ralston Paterson won scholarships to Shrewsbury and Oxford and worked with Hans Krebs. He trained in London and Yorkshire, before moving to Dundee. He specialised in bone disorders, particularly osteogenesis imperfecta, vitamin D metabolism, and osteoporosis. He established a regional bone clinic and was a pioneer of dual energy x ray absorptiometry (DEXA) scanning. His academic writing was prolific. Colleagues around the world remember him with respect and affection. He co-founded the Brittle Bone Society and was chairman for 23 years. He continued to help families affected by bone disease until he died. He enjoyed gardening, genealogy, and travel. He leaves his wife, Sally; three children; and five grandchildren.

Elspeth Paterson, Suzanne Christie, Robert Paterson Cite this as: *BMJ* 2020;369:m2162

Helen Margaret James

General practitioner and medical director of the local primary care trust (b 1945; q Westminster 1968; MRCOG, MRCP), died from progressive supranuclear palsy on 5 February 2020



Helen Margaret James passed her royal college membership examination at the age of 24, but found a problem in getting a teaching hospital post as a married woman. She trained in general practice and returned to the West Middlesex to run the staff medical service. Having moved to Colchester with her husband, she went into general practice with a forensic medical examiner role. In 2000 she became medical director of the local primary care trust, but continued her FME work. One night in the local psychiatric secure unit, a patient threw a male nurse at her, damaging her back. She returned to general practice doing locums until May 2018. She leaves her husband, three children, and six grandchildren.

John Eddy

Cite this as: BMJ 2020;369:m2158

Kenneth Shiffman

General practitioner (b 1922; q Liverpool 1952; FRCGP), died from covid-19 on 1 April 2020 After army service Kenneth Shiffman undertook two preclinical years in



Edinburgh, where he met his future wife, Ellen, a final year medical student. In 1956 they set up in general practice in Liverpool's Scotland Road area; they retired together in 1989. They were both elected fellows of the Royal College of GPs in 1980. Kenneth also served as hospital practitioner in geriatrics at Newsham General Hospital. He continued to carry out insurance medicals and reports into his early 90s. He was a keen single figure golfer, linguist, accomplished artist, and competent bridge player. He served as Worshipful Master of his Freemason's Lodge and was an avid follower and season ticket holder of Liverpool Football Club. Predeceased by Ellen, he leaves three children, eight grandchildren, and two great grandchildren.

Ian Shiffman

Cite this as: BMJ 2020;369:m2163

Monty Seymour Losowsky

Emeritus professor of medicine and former dean, Leeds University School of Medicine (b 1931; q Leeds 1955; MD, FRCP), died from pancreatitis on 8 May 2020



During his varied career, Monty Seymour Losowsky made huge contributions as a physician, a scholar, an educator, a leader, and a mentor. In the late 1960s he saw the potential for the development of St James's Hospital. He became professor of medicine in 1969, and was appointed to develop its academic departments. Consequently, in 1970 St James's was established as a university teaching hospital, the largest in Europe. Monty established a comprehensive gastroenterology and hepatology service. His research and teaching interests were broad and prolific. He published widely, sat on professional bodies, and was a strong supporter of patient advocacy groups. Monty leaves his wife, Barbara, and two children. Peter Howdle

Cite this as: *BMJ* 2020;369:m2159

John Deelun Somauroo

Consultant cardiologist and professor in sports and exercise cardiology (b 1965; q Nottingham 1989; FRCP, FFSEM), died from cancer on 14 May 2020



John Deelun Somauroo

was appointed as consultant cardiologist at the Countess of Chester Hospital in 2000. His sports cardiology work saw him appointed as professor of sports and exercise cardiology at the Research Institute for Sport and Exercise Sciences at Liverpool John Moores University in 2016. His sports cardiology clinic at Liverpool Heart and Chest Hospital attracted athletes from far and wide, and he combined this with work in the cardiomyopathy clinic. John was a member of the English Football Association's cardiac screening panel and cardiologist for several professional football clubs, including Liverpool FC. He had enormous energy and enthusiasm and inspired everyone around him with his excellent clinical care. John died peacefully, surrounded by his family. He leaves his wife, Francesca, and four children.

Rob Cooper, Derick Todd

Cite this as: BMJ 2020;369:m2164

the**bmj** | 18 July 2020 **125**

OBITUARIES

Catherine Hamlin

Internationally renowned humanitarian and fistula surgeon

Elinor Catherine Hamlin (b 1924; q Sydney 1946; AC, MD honoris causa, FRCOG (Eng) ad eundem, FRANZCOG (Aust), FRCS (Eng), hon FACS (America)), died from undisclosed causes on 18 March 2020

Thanks to Australian obstetrician and gynaecologist Catherine Hamlin (née Nicholson), the lives and health of more than 60 000 Ethiopian teenage girls and women, and countless others globally, had much happier outcomes than would otherwise have been the case.

Twice nominated for a Nobel Peace Prize (1999 and 2014), Hamlin dedicated six decades of her long life to the prevention and treatment of obstetric fistula. She transformed the lives of poor, rural mothers for whom childbirth had been a disaster.

Hamlin died in her modest cottage in the compound of the Addis Ababa Fistula Hospital in Ethiopia, a hospital she co-founded in 1974 with her

husband, Reginald Hamlin ("Reg"). An honorary (2012) and eminent (2019) citizen of Ethiopia, Hamlin died in the home and land she loved, surrounded by the people, patients, and staff that she adored.

Life and career

Hamlin was born in Ryde, a suburb of Sydney, Australia, to Elinor and Theodore Nicholson. When a resident at Crown Street Women's Hospital she fell in love with the medical superintendent, Reg. They married on 21 October 1950; their son, Richard, was born in 1952. The Hamlins worked in London and Hong Kong before deciding to move to a low income country needing doctors. In 1959, they started a three year contract at the Princess Tsehai Memorial Hospital in Addis Ababa, Ethiopia.

The Hamlins saw young and often malnourished women with a pelvis too small for childbirth and women whose babies

had presented in an abnormal position who had endured but survived a traumatic, nightmarish, prolonged, obstructed labour without any skilled birth assistance. Their babies were typically stillborn.

The prolonged pressure of the presenting part of the fetus causes tissue necrosis and the formation of a fistula, a hole between the vagina and the bladder or rectum or both, causing a continuous leak of urine or faeces, or both. There was no treatment available for these women in Ethiopia. They were often ostracised and abandoned by their husbands, families, and communities.

The Hamlins had never seen fistulas before. They researched 19th century midwifery and developed surgical techniques to repair and close vesicovaginal and rectovaginal fistulas.

Hamlin Fistula Ethiopia organisation

By 1962 they were able to build a hostel for fistula patients in the hospital grounds. By 1974 the Hamlins had raised sufficient donations to build a 40 bed dedicated fistula hospital on the outskirts of Addis Ababa on a hill above a river. The Addis Ababa Fistula Hospital, now expanded to 120 beds, offers training in the Hamlin holistic model of care (surgical repairs, rehabilitation, and counselling) to health workers from Ethiopia and around the world. In 1974, the Hamlins established a non-profit organisation, Hamlin Fistula Ethiopia.

The pioneering couple stayed working in Addis Ababa despite a long civil war (1974-91) and famine. When Reg died in 1993, Catherine carried on to fulfil their dream of eradicating fistula. She travelled the world tirelessly, seeking donations to pay for free care for her patients so they could be released from "a living death."

In 2002, Desta Mender ("Village of Joy"), a farm and training facility, opened its doors to long term patients requiring medical support. In 2007, the Hamlin College of Midwives began accepting students.

In 2020 Hamlin Fistula Ethiopia, now run by Ethiopians for Ethiopians, continues the Hamlins' work and has expanded to rural and remote areas. It comprises a healthcare network with more than 550 staff serving the Addis Ababa Hospital and five regional fistula hospitals, Desta Mender, the Hamlin College of Midwives, and 80 Hamlin supported midwifery clinics.

The prevalence of fistula has declined substantially since 1959. The Ethiopian government has committed to eradicate fistula and to provide all Ethiopian women with access to quality maternal healthcare during childbirth. Child marriage is now illegal in the country.

The Hamlins restored patients' self-worth and dignity and provided free reconstructive surgery (93% success rate), rehabilitation, counselling, education in new skills, a hand knitted blanket, a new dress, and the bus fare home to reclaim their lives.

Aged 90, Hamlin stopped operating but remained involved in the hospital's day to day activities long afterwards. She received numerous international awards and honours in her lifetime, including the Right Livelihood Award in 2009.

Hamlin leaves her son Richard; four grandchildren; two great grandchildren: a sister: and two brothers.

Barbara Kermode-Scott, Vancouver Island, Canada kermodeb@gmail.com Cite this as: BMJ 2020;369:m1661



126