the rest is also medicine

Mosaic mural helps GPs and patients put pieces back together after covid

A joint art project helped health staff connect with each other and the community

It was as they were emerging from covid lockdowns that GP practice staff at River Place Health Centre in north London started to think about ways they could come together as a team. They had traditionally met up one afternoon a month for an activity such as a walk or a bake-off but one of the GP partners, Sophy Wollaston, felt that they needed to do something more meaningful as a way of marking the end of the pandemic.

A keen amateur painter, Wollaston was inspired by the work of local mosaic artist Tessa Hunkin and decided that an ideal group project would be the creation of a mural to go on the outside wall of the health centre. Wollaston chose a design out of a handful she asked Hunkin to create and with senior receptionist Julia Burnett helped staff create it.

The practice is named after the nearby New river, a waterway created in the 1600s to provide drinking water to London, and the mosaic mural depicts ducks on the river as well as the city's ubiquitous urban foxes. The two cats in the foreground are a tribute to the Whittington Health NHS Trust that owns the practice building and whose health charity provided £3000 of funding for the mural.

Wollaston says that mosaic making is a "metaphor for teamwork," with the whole greater than each individual contribution

Wollaston says that the artwork was as simple to put together as "painting by numbers." Hunkin drew the design back to front on a large piece of brown paper, then staff members cut up the coloured glass and attached them to the paper. When it was finished it was mounted onto a board, the brown paper was melted off, the tiles were grouted into place, and then the artwork was installed on the health centre's facade.

Every single person who worked in the GP practice—around 30 people—took part in the project, which took about four months. Wollaston says that mosaic making is a "metaphor for teamwork," with the whole greater than each individual contribution.

"It was such a relief to be having fun and making something wonderful together after covid," says Wollaston. "You don't have to be particularly arty to do it—you just cut up little bits of glass and you fit them in the pattern like a jigsaw.

"People enjoyed creative play and expressing themselves in different ways. Some people's sections were meticulous and organised and other people's looked a bit more like crazy paving. It doesn't matter as long as you're following the overall design," she says.

Challenging power dynamics

The meditative aspect of mosaic creation led Wollaston to broaden participation to include patients, members of the local community, and other health centre staff—including district nurses and health visitors. Together they created mosaics for four benches built into the functional 1960s building. They chose flowers as a theme in honour of a local flower seller, Tony Eastlake, who died in 2021.

About 100 people—ranging in age from 4 to 88—took part, with Wollaston and other members of

staff seeking out patients who were isolated or vulnerable.

"They loved doing it," says Wollaston. "Mosaic making is very absorbing and epitomises mindfulness. When they were doing it people were distracted from their problems. They forgot about their painful knees or their bereavement."

Initially there were separate sessions for staff and patients but these often merged, "with everybody coming together, teaching each other new skills and shaking up the dynamics both within the team and with patients. It didn't matter if you were the doctor, the healthcare assistant or the patient—everyone is on the same level," she says.

"I thought I knew some of the patients and their medical histories well, having been their GP for many years, but learnt so much about their lives and what was significant to them."

Building networks

The benches are now installed, brightening up the urban landscape and participants keen to carry on have been directed to other community art projects. Wollaston has also led team building workshops with staff from the neonatal and paediatric intensive care units at Great Ormond Street Hospital, who created two mosaic artworks—one depicting dolphins and the other seahorses to reflect the names of the units—after a senior nurse admired the health centre sign from the bus. Families often comment on the murals, which are a constant source of pride to those who created them.

Wollaston says it was valuable to work with colleagues from other parts of the NHS as "it builds networks in a nice way."

Wollaston has more projects in the pipeline, including murals for Whittington and University College hospitals. Staff at River Place are going to continue their shared creativity by developing mosaics of birds to install in their tiny garden.

Other GP practices have also expressed an interest, but funding would need to be sourced.

"Art has been something that I have always found personally therapeutic, helping to create balance in my life. It complements the challenges of busy general practice, of bringing up a family. It uses a different bit of your brain," she says.

"I'm now enjoying mixing art and medicine more. It's great to see other people develop their creative skills and for me to see the role of art in NHS team building activities and social prescribing."

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Wollaston: I learned so much about patients' lives and what was significant to them

PHOTOS BY RICHARD H SMITH

OPINION Becky Cridford, Marina Politis, and Jenna Chambers

A call to reclaim the missing mothers of medicine

The Birth of Christ by Salzburger Maler (c1400)

From nativity scenes attended by male shepherds and the three wise men, to bearded Santas ho-ho-ho-ing, Christmas features an almost all male cast. However, the season was once associated with more women. The magi may well have included women, and girls were commonly involved in shepherding in biblical times. The medieval nativity included midwives, but today, we depict just one woman in the nativity scene.

Medicine, too, has erased women from its history, despite the existence of a long lineage of women healers who passed their knowledge and practice through female generations. Female doctors of the 19th century, from Elizabeth Blackwell to Sophia Jex-Blake, are celebrated as pioneers, when we should instead view them as reclaimers of lost territory.

From the 16th century onwards, professionalisation required physicians to have a university education (available only to men) and a licence granted by a court or church. In this way, women, alongside men who could not pay the fees or did not conform to the dominant religious beliefs of the era, were excluded from formal medical practice. The medical establishment cast their healing as illegitimate through prosecution and punishment.

Recent historical analysis has not found sufficient evidence to support the once popular theory that female midwives and healers were specifically targeted by the European witch hunts. Nonetheless, the Scottish witch trial archives show that among almost 4000 witchcraft accusations, 118 women and 24 men were persecuted for practising folk healing or midwifery.

Today, the domestic nature of much traditional healing knowledge, which was passed down informally, means that this information has often been overlooked for the rich repository of empirical

Misogyny and manuscripts

A story of one woman's fight against prejudice

It is a truth universally acknowledged that a researcher in possession of a great manuscript, must be in want of a publisher.

However little known the researcher may be to those eminent in her field, a conviction that her work is of great import will render this ambition so fixed in the person's mind, that she will persevere through the cruellest of rejections to see her work in print.

Marianne Millwood was such a person. Clues to the reason for the rejections might be found in her sex and the title of her manuscript: "A treatise on the absence of the accurate representation of women in the education of our physicians, and the implications of the lack thereof."

To understand how Marianne came to write this manuscript, we must learn something of her character and provenance. Marianne was two and twenty years old. She had a quick intelligence and a frank way of speaking which was considered endearing in her childhood but unbecoming in a young woman. Marianne had passed her girlhood in the village of St Mary's in Hampshire with her Mama and Papa, Frederick her twin, and their elder brother, Robert. Marianne and Fred spent many happy years adventuring in the house and parkland until, when they turned 8, their Papa engaged a governess for Marianne and a tutor for Fred.

Being accustomed to sharing their discoveries and curiosities, Marianne and Fred were soon spending their afternoons away from the gaze of their tutors sharing each other's lessons. Thus, both siblings acquired a broad education which, although greatly admired in Fred, Marianne was compelled to conceal, as it was widely agreed that an educated woman was most unattractive. As she did not wish to find a husband, if any young gentlemen pressed her to dance more than once in an evening, she deftly repelled them with her musings on Boyle's law or the movements of the planets.

Marianne soon learnt that her parents did not share her satisfaction with the situation. Mr and Mrs Millwood decided that she and Fred must go to stay with their widowed Aunt Margaret in London where there would be more potential suitors for Marianne and where Fred could study his chosen profession of medicine.

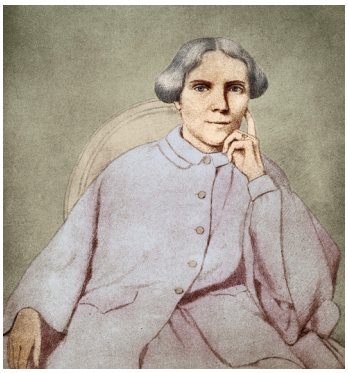
Aunt Margaret was much occupied with her charitable works, and so Marianne was left often to seek her own diversions. Her restless intellect settled on Fred's medical texts, and she pressed him for detailed descriptions of the cases he had encountered each day and his discoveries from the dissecting room. She yearned to see for herself the anatomy described in the texts, and to comprehend how the pathologies she was reading about manifested in the patients in the hospital.

Marianne knew that it was possible to be female and educated without succumbing to infirmity

When one day, Fred was confined to bed with a fever Marianne determined to take his place in the lecture theatre. She borrowed his clothes, cut her hair to imitate her brother's style, and determined to speak only in a hoarse whisper. For the fortnight's duration of Fred's illness, Marianne attended lectures in the dissecting room and rounds of the hospital.

Marianne was angered and horrified by what she observed and heard. She was dismayed by the lack of propriety demonstrated by the students and professors, and the way they discussed female patients.

Most perturbing of all to Marianne, was the propensity to attribute all illness to the pathological state of being female. The accepted explanation seemed to be that it was only



Pioneers or reclaimers? Elizabeth Blackwell (left) and Sophia Jex-Blake

Traditional medicine laid the foundations for treatments we use today

observation, ecological understanding, and community expertise it represents. Traditional medicine or healing is regularly dismissed, but it laid the foundations for treatments we use today. Many modern pharmaceutical drugs originate from the active ingredients of plants—often stewarded by women or indigenous communities—which are now extracted for use by pharmaceutical companies.

The fight for inclusion

By the 19th century, as women fought for the right to study and practise medicine professionally, medical science was used by male doctors to try to prevent their inclusion. In 1874, the psychiatrist Henry Maudsley argued that any attempt to educate women in medicine after puberty would injure their reproductive functionality.

Fortunately, these ideas have now changed, but the original ideology can be found in structures and inequalities that persist today. This year in the UK, the majority of people in medical occupations are female, but gender equity remains elusive as women face pay gaps, sexism, and training barriers.

Professionalisation brought enormous gains, but it also limited who could perform healing work, what counted as knowledge, and whose bodies mattered. Inequalities in the health outcomes of patients and in practitioners' careers continue to reflect these origins.

Seeking a full understanding of medicine's past means re-examining what was lost, and imagining what might yet be restored. This could include a greater recognition of the healing power of the environment and the natural world, or the benefit of care structures that value relationships and community.

As with all history, medicine has unheard voices and untold stories that we should explore; filling these gaps in knowledge may provide new ways to meet the social, climate, and demographic challenges ahead.

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to be expected that women would become ill if they worked, undertook physical activity during menstruation, or were educated.

Marianne knew that it was possible to be female and educated without succumbing to infirmity and on her daily walks she saw women working in physically demanding jobs. Most strikingly, Marianne had observed with her own eyes in the dissection room that the uterus and ovaries could not roam around the body causing illness.

When Fred returned to his studies, Marianne set about gathering testimony to present in her treatise. She asked women to describe their experiences of menstruation and its cessation, childbirth, illnesses, and their treatment from physicians. She asked educated women of her acquaintance to write their histories and transcribed the stories of servants, nursemaids, washerwomen, and patients in the fever hospital.

Having gathered a huge body of narrative, she discerned common themes and used these to argue that the education of physicians should cease to promote the view of the female body as a pathological state. She advocated for descriptions of normal menstruation and childbirth, as experienced by women, to be included in medical education, and for women to be educated as physicians.

On her first attempt at publication, the manuscript was returned by the next post with a curt note informing her that the publisher was a medical journal and did not accept manuscripts from women. A second attempt met with a similar response. She tried submitting her work under a male pseudonym, but met with an even fiercer rejection, the editor opining that the "stories of hysterical women" had no place in a medical journal.

And here we encounter Marianne, two years into her endeavour to seek publication of her treatise. Hitherto, she had kept her family in ignorance of her work but feeling sorely disheartened, she confided in her aunt, who was much interested in Marianne's work and offered to pay for the printing of the work in pamphlet form. Fred was also taken into her confidence and he, too, recognised the truth in Marianne's treatise. Two hundred pamphlets were duly printed, and Marianne and Fred proceeded to distribute these to nurses at the hospital and young physicians of Fred's acquaintance; most ended up trampled in the dirt.

Fred and Margaret, however, continued to encourage Marianne and promote her work. At their persuasion, she wrote letters to periodicals and newspapers and continued to print and distribute her writing. Marianne began to receive correspondence from midwives, nurses, and ambitious young physicians who wanted to improve the lot of their female patients. Her purpose rekindled by these glimmers of interest, Marianne renewed her efforts to collect and publish testimony from women about their lives and experience of illness. Throughout her long life she toiled tirelessly, anticipating a time when physicians would cease to see the female body as inherently pathological, and when the recorded lived experience of individuals would be accepted as valuable scientific research.

Sadly, this did not come to pass in Marianne's lifetime. Nor did she see a time when female doctors worked unencumbered by harassment and prejudice and achieved the same prominence as men throughout the profession; or a time when women's health concerns were assigned the same priorities in medical research, policy, education, and practice as other common conditions. Marianne died over 150 years ago; I wonder, dear reader, if such circumstances will prevail in your lifetime?

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With thanks (and apologies) to Jane Austen.
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EDITORIAL

Advancing migration policy for health

Governments need to ensure meaningful inclusion of the health sector

Migrant integration, asylum policy, and immigration border control remain at the centre of political and public debates. Policies favouring immigration are increasingly framed as threatening national security, sovereignty, and national identity.[1] Analyses indicate that nationalist governments tend to implement more restrictive "hostile" immigration policies, and these measures are associated with poorer inclusion, integration, and health outcomes for specific migrant groups.[2 3]

Migration is integral to sustainable development and, if well managed, benefits countries of both origin and destination.[6] Among countries in the Organisation for Economic Co-operation and Development, nearly one in five doctors and one in ten nurses are foreign trained, and in some systems, such as the UK and Ireland, migrants comprise 35% to 47% of doctors, helping to ease chronic shortages and sustain service capacity.[7]

International migrants sent $656bn (equivalent to the GDP of Belgium) in remittances to low and middle income countries in 2023. This surpassed foreign direct investment and overseas development assistance combined, highlighting migration's major role in global economic development.[9] Beyond monetary transfers, migration facilitates knowledge, cultural exchange, and drives growth through diaspora investment, including health system strengthening.[10 11]

However, migration has complex effects and can also exacerbate inequalities. For instance, many low waged labour migrants endure precarious work in "dirty, difficult, dangerous" jobs in sectors such as construction and agriculture, with barriers to healthcare and increased risk of occupational injuries.[12]

Many countries lack political will and expertise for migrant inclusive health systems

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Migrant workers experience more work related morbidity[13] and are less likely to use health services than comparable non-migrant workers.[14]

Declining political will

Migration health broadly refers to the complex interactions of human mobility on population health.[15] It encompasses the effects of migratory pathways, such as labour migration and refugee resettlement, on individual health and the public health effects in countries of origin, transit, and destination.[15] Migration health is recognised as a global health priority and is enshrined in numerous high level inter-governmental agreements such as the Global Compact on Migration[16] and World Health Assembly resolutions on the health of migrants and refugees.[17] Despite this, successive global consultations on migration health involving governments, the United Nations, civil society, and academia held in 2008, 2017, and 2023 indicate inconsistent progress, with calls for greater action.[17]

Remarkably, the UN convention for protecting of the rights of migrant workers and their families (ICRMW) has lower ratification than the convention against torture,[18] indicating resistance to states ensuring migrant protection. Many countries lack the political will and dedicated technical expertise to design, implement, and evaluate migrant inclusive health systems. The recent evisceration of funding from agencies such as the UN migration agency and World Health Organization because of global health funding deficits, have further eroded technical assistance to support countries.[19]

PAUL SMYTHE/ALAMY

Intersectoral coordination

Tackling the social determinants of migration health requires intersectoral coordination between ministries of health and other sectors. One example is the lack of migrant health considerations in policy to facilitate temporary movement of workers; health safeguards for migrant workers remain fragmented, and worker protections are absent from national preparedness and response plans.[21] Comprehensive reviews by Canada[22] and Singapore[23] in the aftermath of the covid-19 pandemic pointed to systemic failures to consider the health needs of migrant workers. Such protection requires intergovernmental coordination and policy reform, as well as revisions to bilateral agreements.

A fundamental step to meaningfully advance migration health and its governance is to establish an intersectoral coordination structure at national or subnational level. In the Philippines for instance, a whole-of-government approach was taken to forge an interministerial process to formulate an evidence based migration health policy and research agenda that meaningfully integrated academia and civil society in the decision making process.[24]

While migration policy will forever be vulnerable to the vicissitudes of political opportunism and populist rhetoric, building health and migration systems that are migrant inclusive through robust, intersectoral, and evidence based approaches is critical.

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OPINION Jan Till

Video hospital consultations have opened up my world—and that of my patients

The insights into patients' lives can help tailor treatment to their individual needs, says **Jan Till**

Remote hospital clinics were brought in with little-to-no introduction, part way through the covid-19 pandemic. While there are of course limitations to them and their suitability—they have allowed me to gain a real insight into my patients as people beyond the clinic. From meeting pets to joining them virtually while they work or holiday, virtual consultations have provided insight into my patients' worlds.

As a congenital electrophysiologist I see children, adults, and families with rhythm abnormalities and inherited cardiac conditions. This means my clinics can involve a single patient or whole families of three generations. Often patients have to be seen throughout their life and so the commitment to hospital appointments is immense.

My colleague and I have established a hybrid clinic with some patients attending remotely and some in-person depending on the patients' needs. And we are not alone. According to NHS England, 99% of general practices and 77% of NHS trusts can now offer video consultations.

Many patients attending my clinic virtually seem to enjoy the fact that they can attend from the comfort of their own home. This works well for whole families in the inherited conditions clinic who want to share an appointment, and sometimes I open the computer link to find generations of family members squeezed onto a sofa or around a table waiting to talk. A specialist nurse or genetic counsellor can also beam in.

Sometimes I open the link to find generations of family members squeezed onto a sofa

Of course, they do have their limitations. The IT doesn't always function, and when this proves insurmountable last-ditch phone calls, sometimes on speaker phone for multiple patients, have to suffice as a temporary measure. From a doctor's point of view, it can be less easy to establish rapport when giving difficult news. It is also impossible to carry out anything other than a visual examination, although all manner of body parts have been held up to the screen for my advice.

Qualitative studies based on interviews with patients and doctors at secondary care services have highlighted some of these challenges as well as the advantages, such as reducing travel time and improving accessibility to healthcare.

Video consultations are particularly suited for routine follow-ups. The patient doesn't need to travel unless they need tests that can only be done in a hospital. Importantly, this cuts costs for many people, and patients and families no longer have to wait in a crowded, often miserable waiting room watching the clock on a beige wall for long periods—something that many patients have told me is a very depressing part of having a lifelong condition.

Personal insights

In my experience, virtual access allows a wonderful insight into the patient's home and life. It has been truly delightful to see a small part of my patients' worlds and has enriched my understanding of what they are dealing with alongside their heart condition far beyond many face-to-face appointments at the hospital ever did. This has helped me tailor care to their individual requirements.

Many patients have used the technology to join from work—minimising their time away. I have talked to patients attending virtually while perched on scaffolding, in warehouses, and in offices. One patient was in the middle of a news report and requested that their film crew give her a minute while she spoke to me.

I have greatly enjoyed meeting everyone's pets. Children have held waggling, web footed terrapins with gaping mouths, and struggling guinea pigs up to the computer screen for me to admire. Sultry nonchalant cats often stroll across the computer screen, and uncontrollable barking dogs interrupt proceedings when a postman arrives at the door.

Summer brings its own flavour, and I have been able to enjoy the atmosphere of sports day, school plays, and fetes with well patients. Many patients have joined while on holiday, and I have been shown hotel rooms, bars, and restaurants across the world. These consultations can work well and obviate the need to change appointments around holiday dates.

Some more adventurous patients have joined while participating in activities. One joined in her swimming costume complete with swimming cap and goggles at an outdoor swimming pool on a hot summer's morning. It offered insight into her lifestyle, and brought some beautiful sunshine into my morning at work.

Our lives on screen have their downsides of course. But for the doctor-patient relationship, the now widespread adoption and acceptance of video appointments has, in my view, brought much benefit. My working life has certainly been enhanced by this new medium.

It has improved my understanding of patients. This means I can provide more personalised care. I hope my patients have found it helpful too—no matter where and how they end up calling me.

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ORIGINAL RESEARCH Population based retrospective cohort study

Acute effects of daylight saving time clock changes on mental and physical health in England

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Even small effects can have substantial implications for demand for NHS appointments and prescriptions

Objective To explore the acute effects of daylight saving time clock changes on mental and physical health events in primary and secondary care in England.

Design Population based retrospective cohort study.

Setting English primary care practices contributing to the Clinical Practice Research Datalink GOLD database, linked to hospital admissions and accident and emergency data.

Participants 683 809 people (road traffic injuries: all ages; cardiovascular disease: aged ≥40 years; all other conditions: ≥10 years) registered with a participating English general practice, with a health event for one of the health conditions of interest in their primary or secondary care record in the eight weeks surrounding the spring or autumn clock changes between 2008 and 2019.

Main outcome measures Health events were defined as a diagnosis code (or symptom code and prescription for mental health conditions in primary care) of anxiety, major acute cardiovascular disease, depression, eating disorder, road traffic injury, self-harm, or sleep disorder in primary or secondary care or a psychiatric condition in accident and emergency. Negative binomial regression models, adjusted for day of the week and region (and Easter weekend in spring), compared mean event rates per day in the week after the clock changes and the control period (four weeks before the changes and weeks 2-4 after).

Results In the week after the autumn clock change, five health conditions had fewer events: anxiety (from 17.3 events per day (per year, per region) to 16.7; incidence rate ratio 0.97, 95% confidence interval 0.95 to 0.98), acute cardiovascular disease (from 50.0 to 48.9; 0.98, 0.96 to 0.999), depression (from 44.6 to 42.7; 0.96, 0.95 to 0.97), psychiatric conditions (from 3.5 to 3.3; 0.94, 0.90 to 0.98), and sleep disorders (from 5.4 to 4.9; 0.92, 0.87 to 0.97). Little evidence was found of reductions in eating disorder diagnoses, road traffic injuries, or self-harm or of changes after the spring clock change.

Conclusion The week after the autumn clock change was associated with a reduction in events for cardiovascular disease, sleep disorders, and mental health disorders, but little evidence suggested that the spring clock change was associated with a change in the number of health events. Electronic health records contain the date that a health event is recorded by a clinician, which is not necessarily the date of symptom onset.

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Introduction

Research conducted outside of the UK suggests that daylight saving time clock changes may be detrimental to population health, via changes in light exposure and disruption to sleep and circadian rhythms.[3] Although several UK studies have examined the effects of the clock changes on sleep,[15-18] research on the acute downstream effects of the clock changes on health in the UK has been limited. We hypothesised that the number of events for all of these health conditions would increase after the spring clock change, when people tend to lose sleep, and decrease after the autumn clock change, when they typically gain sleep.

Methods

We used the Clinical Practice Research Datalink GOLD database containing anonymised, routinely collected medical records from participating primary care practices using the Vision software system.[36] Linked hospital data were available only for English practices.[36]

To be included in this study, patients had to have a health event for one of our eight health conditions of interest in their primary or secondary care record within the eight weeks surrounding the spring or autumn clock changes between 2008 and 2019. These conditions were anxiety, acute major cardiovascular disease, depression, eating disorders, psychiatric conditions (accident and emergency only), road traffic injuries, self-harm, and sleep disorders. We defined health events in secondary care as the presence of a diagnosis code entered during a hospital admission or accident and emergency consultation. We defined health events in primary care as the presence of a diagnosis code recorded during a general practice consultation, or a symptom code plus a relevant prescription within 90 days either side of the code. Our final sample consisted of 683 809 patients and 1 565 032 health events.

We did negative binomial regression analyses, adjusted for the day of the week and region (and Easter weekend in spring), to estimate incidence rate ratios and 95% confidence intervals comparing the mean daily number of events (per year, per region)

	Incidence rate ratio (95% CI)	Incidence rate ratio (95% CI)
Anxiety		0.97 (0.95 to 0.98)
Acute cardiovascular disease		0.98 (0.96 to 1.00)
Depression		0.96 (0.95 to 0.97)
Eating disorders		0.97 (0.88 to 1.08)
Psychiatric conditions in A&E		0.94 (0.90 to 0.98)
Road traffic injuries		0.97 (0.94 to 1.00)
Self-harm		0.98 (0.93 to 1.02)
Sleep disorders		0.92 (0.87 to 0.97)

Adjusted rate ratios of mean number of health events per day in week after autumn clock changes compared with control period (England, 2008-19)

in the first week after the clock changes with those in the control period. The control period consisted of the four weeks before the clock changes and weeks 2-4 after the clock changes.

Patient and public involvement

In this study, we analysed routinely collected electronic health records data. Patients and the public were not directly involved in the design, conduct, reporting, or dissemination plans.

Results

We found little evidence that the spring clock changes were associated with a difference in the number of health events recorded in the week after the change. In the week after the autumn clock change, we saw a reduction in the mean number of events per day for anxiety disorders (−3%) (incidence rate ratio 0.97, 95% CI 0.95 to 0.98) (from 17.3 events per day (per year, per region) to 16.7), major acute cardiovascular disease (−2%) (0.98, 0.96 to 0.999) (from 50.0 events per day (per year, per region) to 48.9), depression (−4%) (0.96, 0.95 to 0.97) (from 44.6 events per day (per year, per region) to 42.7), psychiatric conditions in accident and emergency (−6%) (0.94, 0.90 to 0.98) (from 3.5 events per day (per year, per region) to 3.3), and sleep disorders (−8%) (0.92, 0.87 to 0.97) (from 5.4 events per day (per year, per region) to 4.9) (figure).

Discussion

In this population based retrospective cohort study, we found a reduction in the number of events (diagnoses or symptoms and accompanying prescription for mental health conditions in primary care) recorded for multiple health conditions in the week after the autumn clock change. The study benefited from access to 12 years of data from a large dataset of linked electronic health records that is broadly representative of the UK population. However, electronic health records include only health events for which the individual seeks medical help. More subtle effects on health, such as a slight dip in mood, might not have been captured in this study. Additionally, the date of a health event in electronic health records represents the date that a clinician recorded the event. This is not necessarily the same as the date of the onset of the health condition.

Our study contributes to the ongoing debate about England's clock change policy. In aggregate, our evidence and the rest of the literature suggest that the effects of the clock changes on health are not consistently harmful.[62] The reductions in health events reported in this study are relatively small in terms of percentages (decreases of 2-8%). However, because the clock changes affect the whole population of England, the underlying change in number of events is high. Even small effects can have substantial implications for demand for NHS appointments and prescriptions.

In this study, we focused on the short term effects of the clock changes on health. However, debates about whether to abolish daylight saving time should also account for the longer term effects of observing it for seven months of the year. These longer term effects are more difficult to ascertain because of confounding from other seasonal factors.[34 74 75] That said, our results can be interpreted in several ways. On the one hand, we found that the clock changes were not associated with negative health effects (the spring clock change was not associated with changes in the number of health events, whereas the autumn clock change was associated with a reduction in health events). On this basis, it could be argued that we should keep the current system of clock changes. On the other hand, our results suggest that sleep and morning light exposure are important for our mental and physical health. It could therefore be argued that, if England does abolish the clock changes, we should opt for permanent standard time (GMT), which prioritises morning light and sleep, rather than permanent daylight saving time.[34]

In summary, the week after the autumn clock change was associated with a reduction in cardiovascular disease, sleep disorders, and mental health disorders. However, little evidence suggested that the spring clock change was associated with changes in the number of health events.

EDITORIAL

Repudiation of global south debt to meet human need

Collaborative refusal to repay debts could free countries to meet development goals

Countries in the global south pay $300bn (£229bn; €260bn) a year in interest on external debt[1]—more than their expenditure on health or education.[2] These payments often represent a net transfer of resources from debtor countries to creditor countries in the global north. The resources could be used for development and to meet human needs but are instead transferred to foreign private and multilateral lenders.[3]

The US and other global north states have leveraged their power as creditors—and their control over the World Bank and the International Monetary Fund (IMF)—to force southern governments to accept structural adjustment programmes that have imposed a range of neoliberal economic policy measures, including mass privatisation, market deregulation, and cuts to social programmes.

Each additional policy reform imposed by the IMF has been shown to reduce access to health systems such that countries subjected to average adjustments in 2010 would see health system access fall to 2002 levels. Structural adjustment programmes increase poverty[4] and neonatal mortality.[5]

Campaigners have called for governments in the global north to cancel external debts, but they consistently refuse, aside from relatively small trims that often have additional structural adjustment conditions attached.

Global north creditors have strongly opposed the UN Framework Convention on Sovereign Debt, which could provide a fair and transparent mechanism to prevent and resolve debt crises without structural adjustment.[8,9] The fourth international conference on financing for development, in summer 2025, failed to adopt the UN framework convention because of vetoes by wealthy governments. Instead, this multilateral forum ended in the affirmation of a set of non-binding proposals to address debt and climate finance using new debt based financing mechanisms.[10]

Targeted action

One bold proposal is to establish a debtors' coalition that would undertake collective debt repudiation against northern creditors.[12-14] Repudiation means refusing to recognise the responsibility of continuing payment under existing terms.[15] It can target bilateral, multilateral, and private creditors.[16]

Debt repudiation equates to defaulting, which comes with the risk of reducing access to new financing from northern creditors. In 2022, facing economic crisis and rising poverty, Sri Lanka defaulted on its foreign debt for the first time.[17] It was excluded from external financial markets and experienced a series of hardships. After a change in government, Sri Lanka re-entered the IMF but with stringent conditions and substantial benefits for private creditors,[18] a programme designed as a lesson to other countries on how "not" to default.[19,20]

For debt repudiation to succeed it has to be collective. Increasing the bargaining power of debtors over creditors could transform the terms of engagement, including regarding the nature and scale of any penalties. But repudiation will not be enough to abolish the "debt system." Debt crises in the global south are the inevitable outcome of a system that revolves around a few key currencies—mainly the US dollar and, to a lesser extent, the euro—which countries in the South are obliged to accumulate and over which they have no control. This system explains why countries such as Zambia and Ghana fell into a deep debt crisis from 2020 after having benefited from debt cancellations in the mid-2000s.[21-23] In other words, removing the debt is not enough: it is the "debt system" itself, as an exploitative system, that must be dismantled.

Removing the debt is not enough: the debt system must be dismantled

PETER MARSHALL/ALAMY

To achieve this, collective debt repudiation will have to be supplemented by stronger south-south trade and a curb on unnecessary imports from the global north. During the covid-19 pandemic, south-south cooperation initiatives in health such as waivers on vaccine licensing, intellectual property flexibilities on access to technologies, and cooperation on policy reforms reduced dependency on the global north.[24] Taking this approach, global south countries need to devise payment arrangements, including currency exchange, that circumvent the need to accumulate US dollars by allowing them to acquire their imports in their domestic currency. Alternative financing vehicles which do not centre western governments can be explored or deepened.

Collective debt repudiation could showcase the power of global south countries and could initiate steps towards the elimination of the imperialism of foreign debt. This could enable southern countries to pursue sovereign economic development, increase healthcare and education provision, with beneficial effects on health outcomes and social indicators for citizens.

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