We medicalise normal physiology (and a large proportion of NHS staff) to little benefit.

NO HOLDS BARRED  Margaret McCartney

Let’s concentrate on dehydration

“Remember—healthy pee is 1 to 3, 4 to 8 you must hydrate!” So goes a rhyming couplet from the Think Kidneys website, the online presence of the Transforming Participation in Chronic Kidney Disease programme. It comes with a colour chart, not unlike those available in shops selling paint, ranging from the off-white shade (good) to shade 8, which I’d describe as orange with a hint of rust (severely dehydrated).

I suspect that the normal colour of most doctors’ pee when at work—if they get to the loo at all—will range from “dehydrated” to “severely dehydrated” (that is, from mellow yellow to that classic dark orange). But is this actually pathological? Dehydration is surely by definition pathological and would need blood tests to determine it: a physiological adjustment of our renal output shouldn’t be classed as dehydration but as a body that needs fluid to continue functioning normally.

Human physiology is amazing: drink more, and we pee out more urine; drink less, and our kidneys concentrate it. This ballet is orchestrated through our osmoreceptors and baroreceptors, by antidiuretic, angiotensin, and aldosterone hormones, and by the sensation of thirst, which everyone remembers from tutorials in medical school. So, when does physiology become pathology?

All sorts of considerations apply when people have a specific diagnosis, are ill, or are in hospital and cannot respond to the natural call of thirst. They may need help to drink, or they may be on deliberate fluid restrictions. But we medicalise normal physiology (and a large proportion of NHS staff) to little benefit. We must also think of those poor people in the bottled water industry, whose financial profit and pile of plastic empties are fuelled by the fear that, if we aren’t running clear urine, something is inherently wrong with us.

The bottom line is this: where’s the evidence that telling people to monitor the colour of their urine and saying that they’re in a pathological state results in better health outcomes? Common sense in medicine needs evidence—because we frequently, and with good intentions, get it wrong, even while seeming sensible.

Then there are “sick day rules.” These are a Scottish Patient Safety initiative for patients to have a credit card sized infographic advising them to stop using angiotensin converting enzyme (ACE) inhibitors, anti-inflammatoryatories, and diuretics during intercurrent illness, to prevent acute kidney injury. This sounded very sensible when it was initiated a couple of years ago. However, my initial support has wavered because no good evidence shows that this will improve mortality or morbidity.

I should have asked for better evidence first. After all, we thought that steroids would help head injury, that caring for a simulation baby would reduce teenage pregnancy, and that vertebroplasty would treat painful osteoporotic fractures, when they did nothing of the sort.

The human body is mainly incredible. Professional intervention needs evidence. Can we please have free access to tap water and the time to drink it—but also a proper randomised controlled trial of well intentioned safety initiatives before they’re rolled out?

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Lessons from the front line

Lawsuits are miserable for doctor defendants but can lead to better, safer practice

In the summer of 2002 I was sitting in an Oxford cafe with a professor of medical ethics. I had just finished a masters degree in the history of medicine and, intrigued by the dubious conduct of some doctors in the past, was contemplating a career in medical ethics. “What do you want to do?” asked the professor. “I want to help doctors,” I replied. And so started my journey in medical ethics. Fifteen years later, now working as a barrister, I sue doctors. The way to reconcile these two facts is that lawsuits, though miserable affairs, can lead to better, safer practice. But this only occurs if lessons are learnt, and this column has been an outlet for those lessons. Here are further reflections from the past two months.

I represented a medical student in a fitness to practise hearing. The chief concern was his lack of insight into his rudeness towards others. Insight can be defined as the ability to understand intellectually and emotionally why a behaviour is wrong. Without this ability, learning is stifled and poor practise goes unchecked. A compulsory question for interview panels, whether they are selecting medical students or consultants, should be: does this person have insight?

Cosmetic surgery

On occasion I advise on cosmetic surgery cases. I attended a course on the topic last month, in which the case study, a fictitious one blending the stories of several patients, was a schoolteacher who underwent breast augmentation.

Challenging the victim narrative around NHS doctors

In July, I posted some tweets arguing that doctors still have public respect, high professional status, secure and relatively well paid careers, and a great deal of hard power and soft influence. I said doctors shouldn’t describe themselves as hapless, impotent victims of the state. Plenty of doctors agreed with me. And plenty disagreed vehemently.

Years of below-inflation pay rises, the mistreatment of whistleblowers, and the government’s demoralising attitude to junior doctors during last year’s contract stand-off were all cited as evidence of our disempowerment. They certainly contribute to doctors’ sense of being less influential than we once were—or were expecting to be when we entered training.

Do not skip or rush through surgical checklists. Do not stray beyond the scope of the original consent

In a politically accountable system, doctors will never get to call every shot

If more doctors really are feeling this way it may damage recruitment, morale, and retention and reduce engagement in medical leadership and patient advocacy, with consequences for patient care.

In any case, none of these examples proves that the profession is powerless or has earned victim status. Feelings run high and shouldn’t be dismissed, but I’d challenge the hyperbole.

NHS doctors work in a tax funded, politically accountable system—a principle that most of us still strongly support. But this comes with consequences. As a public service the NHS is influenced by macroeconomics, government allocation, and trade-offs in the use of finite public resources, as well as pressure from a range of stakeholders well beyond medical professionals, not least from patients and voters. Doctors will never get everything we want or call every shot. It’s the same for the military, police, fire service, prisons, and schools.

Pay? The whole public sector has taken an austerity hit. We do better than most and have relatively more security, career progression, pension entitlements, and paid leave.

Public respect? Doctors and the NHS still repeatedly top polls about trust in professionals, despite some horribly disrespectful attitudes we can all encounter. Online reaction to TV hospital documentaries has been incredibly supportive—often awed.
During the operation one of the implants was dropped and, with no spare implant available, the surgeon decided to insert two larger ones. The operation was a success, but the patient was distraught. So obvious was the change that she became the butt of teenage jokes at her school, fell into depression, and quit.

**Nickel allergy**
Coincidentally, the next week I received a new case involving a patient who underwent a knee replacement operation. She was allergic to nickel and had asked for a nickel-free product. In the operation the surgeon removed the old knee, opened the packet for the new knee, and to his horror discovered that it contained nickel. Faced with a large defect cavity, he thought he had no choice but to implant the knee. The patient developed complications. The lessons: do not skip or rush through surgical checklists. Remember, if the patient consents to one thing (a certain cup size or a nickel-free knee) you should not do something else unless there is a medical emergency and asking the patient is impossible. In short, do not stray beyond the scope of the original consent.

In the knee case the surgeon said nothing about the mishap to the patient until she asked some weeks later. She was distraught and lost faith in the surgeon. The lesson: be honest when you make a mistake, however daunting the prospect. You will be surprised how often patients forgive. Remember also the legal duty of candour.

Finally, last weekend I had the misfortune of attending an emergency walk-in centre with an eye problem. Sitting there, I witnessed the depressing sight of sick and injured people walking in, some propped up against a worried helper, others with bloodied tissues packed into their noses, and others pale as ghosts. They looked so despondent that the very experience sunk my spirits. When my turn came, the doctor was cheerful, diagnosed conjunctivitis in an instant, and prescribed some eye drops. I can now see perfectly. The lesson, all too easily forgotten in these litigious times: medicine is a noble vocation admired and appreciated by all, including clinical negligence lawyers and other wicked folk.

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**BMJ OPINION Mary McCarthy**

**It’s time for GPs to be recognised as the specialists they are**

For many years general practitioners have been arguing that they are specialists in general practice and want to be recognised as such.

Many see their European colleagues recognised as specialists in family medicine: 24 out of 28 EU states recognise general practice as a specialty. In fact, European GPs are surprised to find that the UK, which is widely regarded as the founder of modern general practice, does not acknowledge its own GPs as expert specialists.

And it’s not just in Europe. Australia, Canada, and the US also recognise the specialty. A Canadian doctor once told me that in his country consultants were considered “doctors of restricted scope of practice,” whereas GPs were “doctors of unrestricted scope of practice.”

The GMC—despite having two registers, one for specialists and one for GPs—still lists general practice as a specialty on its website. Universities and medical schools have chairs of general practice, and there are relevant professors of the discipline.

If it looks like a duck, swims like a duck, and quacks like a duck, then it is a duck. General practice looks like a specialty, behaves like a specialty, has all the attributes of a specialty, and is a specialty in many other countries—it should be recognised as a specialty in the UK.

It is widely acknowledged that general practice is in crisis, with overworked, demoralised, and underfunded GPs who are increasingly retiring early or moving abroad. We are failing to attract young doctors into the profession because they believe it has less status than hospital posts and is a career with few rewards for the skills it demands.

Recognising general practice as a specialty would raise its profile, confer long overdue status on a beleaguered profession, and acknowledge the skills and expertise needed to deal with patients with undifferentiated illnesses or multiple morbidities.

GPs have a long and rigorous training path to become specialists in general practice and family medicine. The fact that they are not recognised as such is an anachronistic anomaly, which the government would do well to acknowledge.

It is within their power to correct this and it is a measure that would give fresh heart to the UK’s hard pressed GPs.

Mary McCarthy is a GP in Shrewsbury

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**Power? We control curriculums and exams (yes, the GMC and Health Education England have a statutory stake, but they employ senior medics too). We are training supervisors and examiners. We make clinical decisions that determine how most cases are managed. We train junior doctors to make critical decisions, and we are the point of contact for complaints. We are the next of kin when a patient is impossible to contact. We are the people who know them best. We lead clinical audit and quality improvement programmes to help implement it. Our specialist societies and colleges provide clinical and policy influence in their fields.**

*In every service some doctors double up as managers, from heads of department to medical directors, and they foster the culture—good or bad.* If doctors feel bullied, or unsupported or don’t like certain service changes, their line managers are generally fellow doctors.

BMA doctors were influential at every turn of the contract stand-off. Their tactical decisions were central to how events played out.

Of course, doctors have legitimate concerns about the NHS’s future, as well as our own working lives and conditions. And we often disapprove of decisions made or imposed in our name. This doesn’t make us hapless victims. We have to be realistic about what we can achieve, but we must also use our considerable hard power, soft influence, and status to preserve and improve patient care.

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LETTERS Selected from rapid responses on bmj.com. See www.bmj.com/rapid-respondes

INFECTIVE ENDOCARDITIS

Risk is low after dental procedures

Cahill and colleagues endorse routinely offering antibiotic prophylaxis to people at high risk of infective endocarditis when they undergo invasive dental procedures (Uncertainties, 9 September). They quote their own work to support this but do not acknowledge that their findings were challenged during development of the current NICE guideline.

They note that “high risk” patients should be reassured that they have an “extremely low risk” of infective endocarditis after dental procedures—even without antibiotic prophylaxis.

No studies show whether reducing the incidence of bacteraemia with antibiotic prophylaxis reduces the incidence of infective endocarditis. The number needed to treat would be very high—we estimate that several thousand patients would need to be treated to prevent one case of infective endocarditis.

The research community needs to design better epidemiological research and to propose better preventive strategies. Focusing solely on exposure to invasive dental procedures may distract from that research effort.

Mark Baker, director, London
Philip Alderson, consultant clinical adviser, London
Cite this as: BMJ 2017;359:j4733

Authors’ reply

Baker and Alderson emphasise data supporting the decision made by NICE to withdraw antibiotic prophylaxis for patients at risk of infective endocarditis in the UK (Uncertainties, 9 September).

Differing interpretations of best practice in the context of limited data are the essence of the uncertainty that underlies

LETTER OF THE WEEK

Remission of type 2 diabetes

McCombie and colleagues discuss the remission of type 2 diabetes (Analysis, 16 September). When I was given the diagnosis of type 2 diabetes about five years ago, I decided to lose weight by dieting.

I lost 13 kg and now stay between 71 kg and 72 kg. My BMI is 24.3. My blood pressure has only once reached 130/70 mm Hg and is usually <120/80 mm Hg. My cholesterol has been raised for at least 40 years, and I have had a coronary artery bypass graft, a pacemaker, and transcatheter aortic valve implantation. I am 88, and I walk two miles a day.

I have found that the amount of food I need is much less than would be regarded as modest. Although the urge to eat is less intense now, I am hungry most days. People forget that when you reach your target weight you can’t go back to your previous intake.

I find the driving force to “relapse” is hunger. This powerful drive is not only uncomfortable but provokes anxiety. Having specialised in addiction, I came to recognise that my problems with food are closely allied to addiction. I applied what I had learnt from my patients to manage my urge to eat. The difference is that I cannot be a total abstainer from food. I am like a patient maintained on methadone.

David Marjot, retired consultant psychiatrist, Weybridge
Cite this as: BMJ 2017;359:j4728

The BMJ’s series and should be welcomed.

Baker and Alderson reiterate the caveats that we outlined in our article. But we think that decisions about antibiotic prophylaxis should be devolved to individual patients and not taken nationally. This approach, supported by European and American guidelines, enables those at highest risk to make decisions about their care with support from general practitioners, cardiologists, and dentists.

We agree that the rising incidence of infective endocarditis is concerning and that research funding is required. Furthermore, research needs not only to clarify the role of antibiotic prophylaxis for invasive dentistry but also to investigate other novel preventive strategies.

Thomas J Cahill, cardiology specialist registrar, Oxford
Mark Dayer, consultant cardiologist, Taunton
Bernard Prendergast, consultant cardiologist, London
Martin Thornhill, professor of translational research in dentistry, Sheffield
Cite this as: BMJ 2017;359:j4734

SUBSTANCE MISUSE

Injecting drug use continues in older age

Rao and Roche note the global rise in number of people aged over 50 who have substance misuse problems (Editorial, 16 September). This rise also applies to people who inject drugs, at least in the developed world.

The effects of continued injecting on life course and health needs are poorly understood. Primary and other healthcare services might provide a valuable opportunity to screen for health problems potentially associated with injecting drug use or ageing.

Services developed for people who inject drugs should be low threshold and client centred, and this may become especially important as users age. The effects of opioid substitution treatment on cardiovascular function are largely unknown, and high rates of smoking remain a concern.

As people who inject drugs age their presentations to primary and other care for chronic health problems are likely to increase. Services that can tackle these presentations may reduce presentations to costly tertiary settings.

Peter Higgs, senior lecturer, Melbourne
Paul Dietze, professor, Melbourne
Cite this as: BMJ 2017;359:j4738

GOOGLE DEPRESSION TEST

Online screening is inappropriate

Duckworth and Gilbody debate whether Google should offer an online screening test for depression—namely, the patient health questionnaire 9 (PHQ-9) (Head to Head, 16 September).

But PHQ-9 is not a screening tool for depression, rather it is used to monitor the severity of depression and response to treatment. Using it as an online screening test is inappropriate. It can also be inaccurate. Positive responses indicating depression can be the result of hypothyroidism, anaemia, or other chronic undiagnosed disease. The potential for harm through overdiagnosis or wrong diagnosis is inevitable.

The possibility of inappropriate drug advertising
direct to patients via Google is also worrying. Other unintended consequences may occur, as a result of Google using algorithms related to previous searches. The limitations and harms of screening are underappreciated. Perhaps all adverts for screening should come with disclaimers explaining whether they meet Wilson and Jungner’s criteria for an effective screening programme.

Avis Danczak, GP, Manchester
Cite this as: BMJ 2017;359:j4736

Why we must defend suicide in fiction

Arendt et al suggest that 13 Reasons Why violates guidelines on portraying suicide in the media (Editorial, 9 September). However, viewers are not called to sympathise for Hannah, the teenager at the heart of the drama, but instead invited to reflect on the problems of teenagers in the age of social media.

Rather than sanitise fiction that tackles suicide and opens a dialogue with those most in need, we should use its stories to demand the government invest more in mental health services for young people and on information and counselling about self harm and suicide in schools.

Parents, educators, and therapists cannot delegate their role to screenwriters or producers. They need to talk to children and young people openly, not censor what they read or view. Perhaps the failure to confront their own and their children’s existential difficulties is why Hannah’s character threw adults in the show into a panic.

Marco Scalvini, lecturer, London Flandina Rigamonti, psychodynamic psychotherapist and counsellor, London
Cite this as: BMJ 2017;359:j4743

“Edutainment” to reduce the risk of suicide

Arendt et al argue for strengthening guidance on suicide and the media (Editorial, 9 September). In addition to these policy efforts, health promotion can use the media as a powerful tool to reduce suicide.

One of us (TU) has produced Think You Can Shrink?—a reality TV style web series. The design strategically leveraged entertainment and the power of media to encourage viewers to seek help for mental health problems in the hope of improved health outcomes for men. Actors portray suicidal depression and other mental health problems. Lay people who think they are good at giving advice are contestants. Viewers learn about depression, suicidal ideation, and how to communicate with others to encourage them to get help.

Our proof of concept study showed the “edutainment” design works, with viewers being more likely to seek help or know what to say to someone who is suicidal after watching.

Thomas Ungar, associate professor, Toronto
Stephanie Knaak, assistant professor, Calgary
Cameron Norman, principal and president, Toronto
Cite this as: BMJ 2017;359:j4742

Suicide on television

Mental health groups criticised the TV series 13 Reasons Why

FRAILTY AND EXPECTATIONS

Taking responsibility for unrealistic expectations

Oliver mentions relatives’ failure to grasp the imminence of death in frail elderly patients (Acute Perspective, 9 September).

We as a profession are mainly responsible through having overplayed what can be achieved medically. We also need to accept responsibility for our contribution to the increasing frailty and sometimes distress after our heroic efforts in treating interim disorders.

Andrew Thoms, consultant in palliative medicine, Canterbury
Cite this as: BMJ 2017;359:j4760

“Progressive dwindling” and end of life care

Oliver uses the term progressive dwindling to describe the progressive and accelerating functional decline that may occur at the end of life in very old people (Acute Perspective, 9 September). Others have referred to this process as terminal decline or terminal drop.

Empirical evidence of terminal decline has been reported for cognitive functioning and subjective health measures. Using electronic health records in people aged 80 years and over we found a substantial terminal decline in blood pressure in the final two years of life that was not observed in patients who did not die.

Distinguishing changes in health due to aging from those due to dying is difficult. Researchers and clinicians should aim to determine whether these processes are distinguishable to improve end of life care for older people.

Rathi Ravindrarajah, research associate, London
Martin Gulliford, professor of public health, London
Cite this as: BMJ 2017;359:j4772

Frank discussions are needed on the resuscitation status of elderly people

Frail elderly people should not be admitted to care or nursing homes without fairly frank discussions about resuscitation status. Dying should be discussed with the patient and family on discharge when prognosis is poor and future admission probable, particularly for those coming towards the end of life. It is a charitable way of pre-empting inappropriate treatment by the next medical team.

When death has been distressing because families have pushed for unrealistic care they need to be told about the part they played if we are to change behaviour long term.

Simon Kenwright, retired physician, Stowling
Cite this as: BMJ 2017;359:j4768

Wanted: communication and a public campaign

Overexpectation in frailty by relatives and patients (Acute Perspective, 9 September) can be tackled only by two actions:

Improved communication by all staff caring for frail patients and a campaign to inform the public about outcomes for this group of people.

Communication is the responsibility of all professionals: medical and non-medical, in primary and secondary care. Too often we look to each other rather than act.

A publicity campaign is needed to ensure that the information we know as professionals about outlook becomes known by all of society so that decision making is informed and smoother.

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Wanted: communication and a public campaign

Overexpectation in frailty by relatives and patients (Acute Perspective, 9 September) can be tackled only by two actions:
Social care has received substantial media coverage in recent months. There is now acknowledgment of the direct link between the parlous state of the NHS and the social care crisis. Most social and political commentators focus on cuts in public funding of social care, shortages of staff, the increasingly fragile financial state of care home providers, and knock-on consequences for the NHS. The blame is usually placed on the rising numbers of older people, as if the requirement for social care was an unavoidable consequence of ageing. Thankfully, the need for social care is not inevitable. The UK National Institute for Health and Care Excellence made it clear in 2015 that “disability, dementia and frailty can be prevented or delayed.” This remarkable statement received little publicity at the time.

A person’s need for care and support, whether provided by unpaid family carers or professional carers paid for personally or by the local authority, arises when someone is no longer able to manage vital activities of daily living such as washing, dressing, and feeding themselves. For illustration, for some people, the ability to get to the toilet on time is a threshold marking the difference between having carers visit twice a day and requiring live-in or residential care. The cost of care increases fivefold as this threshold is crossed. A residential care placement costs an average of £32 600 a year and may be required for months, years, or decades.

Ensuring that as many people as possible maintain the ability to manage vital activities of daily living requires a cultural change so that it becomes normal to expect people of all ages to be active. Concerted action by national and local organisations is also required to provide infrastructure and options, especially for those who need most help.

The sometimes drastic loss of ability that many older people experience is not an inevitable part of ageing. Ageing is a normal biological process that leads to a decline in vision, hearing, skin elasticity, immune function, and resilience—the ability to bounce back. The common decline in fitness that occurs with age is different, starting around 30 years of age and accelerating more rapidly after age 45. This decline in fitness is made worse if a person moves into a “dangerous” occupation—that is, one that involves sitting. The car, the desk job, and the internet have transformed work. A sedentary lifestyle is one of the top four causes of ill health in the UK, contributing to type 2 diabetes, dementia, heart disease, and recurrence of some cancers.

Many high profile examples exist of healthy older people, but we usually assume that is this is down to luck. There are massive social inequalities in length of healthy life, with better nutrition and more exercise being two important causes. A healthy old age is more likely to result from experiencing lower risks of preventable disease or frailty than from luck.

Effect of disease
The older the age group studied, the more disease is found, but this is not a consequence of ageing in itself—many diseases are caused by environment and lifestyle. Forty per cent of people aged 40 have a long term condition, and the prevalence goes up 10% each decade, with an increasing proportion of people having multiple diseases as the effects of environmental and...
behavioural risk factors accumulate. Small changes in habits—for example, cycling to work, can reduce the effect of sedentary behaviour.12

Fitness often worsens with the onset of disease because of an indirect social impact. For example, caring relatives and professionals, who are often risk averse, may do things for the person rather than encouraging them to do things for themselves.

Genetics are relatively unimportant in determining modern diseases; less than 20% of the risk is genetic, on average across a range of diseases.13 The need for social care is determined more by a loss of fitness than directly by disease and multiple morbidity.

### Keeping fit

The effects of ageing and of loss of fitness are commonly confused. The loss of ability that results from inactivity may lead to a person requiring social care.

People with long term conditions and those who experience pain often mistakenly believe that exercise will make things worse, rather than understanding that the more conditions you have the more you need to improve the four aspects of fitness: strength, stamina, suppleness, and skill. Strength and balance training reduce the risk of falls.14 Furthermore, evidence is growing that recovery of these four attributes of fitness improves cognitive ability and reduces the risk of dementia, not only in midlife but also in the 70s and 80s.15 16 The physical, mental, and social benefits of exercise can help enable people to live more independently and more autonomously.17

The good news is that at any age and with any combination of health problems, exercise provides, in the words of an important report from the Academy of Medical Royal Colleges, “the miracle cure.”18 Exercise may reverse the decline and keep a person above the threshold for needing increased care.

People in their 70s with below average ability (measured as “chair rise” time) who improve this by 25%, to the average speed of those in their 60s, experience a reversal of a decade of decline (figure).19 A recent meta-analysis showed significant improvements in older people’s “up and go” times when exercise ranging from low to moderate aerobic (walking) to high intensity progressive resistance training was started as an intervention; there was a clear dose effect, and those who were the most frail benefited the most.19 20

The prevailing attitude that exercise is for the young while older people should be encouraged to relax needs to be challenged. Physical activity is defined as any movement produced by skeletal muscles that results in energy expenditure, including gardening and walking.20 Exercise is a subset of physical activity that is planned, structured, and repetitive.20

A person’s physical fitness can be measured and includes attributes that are health related (eg, cardiac endurance) or skill related (eg, strength).20 The UK chief medical officer’s guidelines recommend 150 minutes a week of moderate physical activity plus twice weekly strength and balance training for adults of all ages.21 Any physical activity for at least 10 minutes that gets someone slightly out of breath contributes to the 150
minute weekly minimum target and there is a dose-response effect. The Japanese Orthopaedic Association recommends regular 10 minute bursts of brisk walking and sets of squats to prevent “the locomotor syndrome” in older people caused by inactivity and contributing to a “heightened risk of care dependency.” The World Health Organization’s analysis of interventions that work for older adults include “physical activity interventions in a group setting using an existing social structure or meeting place.”

**Support a positive approach**

One major change needed is to challenge and reset the beliefs about what happens to us as we grow older, to know that it is possible to combat some effects not by a drug or potion or elixir of life but by increasing activity—physical, mental, and social.

Encouraging research suggests the key to reducing the incidence of dementia is unlikely to be a new drug but keeping healthy and feeling well in the short term—namely, increasing activity, stopping smoking, good nutrition, and sparing use of alcohol.

Gyms, walking groups, gardening, cooking clubs, and volunteering have all been shown to work in improving the health and wellbeing of people at all ages with long term conditions.

Models of social prescribing can be successful.

**Healthcare can support activity**

Health services can aggravate the problem and increase the need for social care. People admitted to hospital often experience a rapid decline in function. Patients are often encouraged to stay in bed or in the chair next to the bed and not to go to the toilet without assistance because of a fear of falls, which are reported as the biggest fear of falls, which are reported as the biggest risk of care dependency.”

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Older people taking regular exercise could save the UK billions as well as strength and balance training to increase muscle strength and “get up and go” times.

Need is a function of service organisation as well as ability; if too much is invested in polypharmacy and passive care, activity and rehabilitation services may be overlooked.

For people who fear reduced independence, the solution is not to hope for a quick exit from this world but to do enough activity every day and with every diagnosis. The attitudes of health and care professionals need to change too. Functional decline and the need for social care are not inevitable consequences of ageing. A quarter of women and 20% of men in the UK report doing no activity at all in a week, let alone the recommended minimum 150 minutes to maintain health.

**Reducing social care need**

People need social care when they are unable to perform some activities of daily living in their environment. The WHO report on ageing differentiates two useful concepts: “intrinsic capacity” as the composite of all the physical and mental capacities of an individual and “functional ability,” which includes intrinsic capacity but additionally how the individual interacts with their environment.

Action is needed on both fronts—for example, adaptations to environments and places that promote active travel, but keeping healthy and feeling well in the short term—namely, increasing activity, stopping smoking, good nutrition, and sparing use of alcohol.

The value to society of even modest improvements in fitness could be several billion pounds a year, since the mean care needs of a person almost double between age 65 and 75, and triple between age 65 and 85.

We need individuals to understand their role in cutting social care demand by being active. National and local organisations must act to encourage opportunities for people to be active, building this into our environments, transport, and schedules. The gap between the best possible level of ability and actual ability can be reduced at any age, no matter how many long term conditions the person may have. The rise in ability may not only restore the person to the ability they enjoyed 10 years earlier, it may make the crucial difference between living well at home or being dependent on social or residential care.
OBITUARY

Ruth Pfau

German nun who settled in Pakistan and led fight against leprosy

Ruth Pfau (b 1929; q University of Marburg, Germany, 1956), was admitted to hospital after a dizzy spell and died on 10 August 2017

In 1960 Ruth Pfau, a Catholic nun who was also a gynaecologist and obstetrician, left Germany to serve in India. But during a stopover in Pakistan to pick up her visa, her plans changed drastically. As she recalled many years later, God intervened, and Pfau remained based in Pakistan for the rest of her life. Instead of providing gynaecological care and delivering babies, she fought leprosy. Through her efforts more than 50 000 patients were treated, and in 1996 leprosy in Pakistan was declared “under control” by WHO. She continued to monitor and treat the disease, and also to fight tuberculosis and other diseases of poverty.

State funeral

Pakistan’s government honoured Pfau with a state funeral and ordered the national flag to fly at half mast. Her funeral mass was held at St Patrick’s Cathedral in Karachi, and she was laid to rest in the city’s Christian cemetery. The 1900 bed Civil Hospital Karachi was renamed the Dr Ruth K M Pfau Hospital in her honour.

In 1960 Pfau was a member of the Catholic church order of Daughters of the Heart of Mary. Nuns based at the order’s community in Karachi took Pfau to visit a leprosy care project they had started four years earlier. The dispensary had no electricity or running water and was in one of Karachi’s worst slums. Pfau was touched by the sight of one patient crawling to the dispensary on his hands and knees through dirt and slime. She decided to remain in Karachi and devote her life to caring for and treating people with leprosy.

Touched by what she saw in a leprosy care project, she decided to remain in Karachi and devote her life to fighting the disease

Early life

Ruth Katharina Martha Pfau was born on 9 September 1929 in Leipzig to Protestant parents. When she was 14 Allied planes bombed the city, and her family’s home was severely damaged. After the war ended, Leipzig became part of East Germany. In 1948 Pfau fled and joined her father in West Germany. In 1949 she started studying medicine at Mainz University. She was baptised in 1953 as an evangelical Protestant, but later—after transferring to Marburg University—converted to Catholicism.

Faith

As a university student Pfau had boyfriends, one of whom proposed marriage. Pfau later recalled that she had eagerly anticipated the proposal. But when it finally came, she declined. She said she had “received a calling from God,” adding: “When you receive such a calling, you cannot turn it down, for it is not you who has made the choice. God has chosen you for Himself.”

Pfau started training in internal medicine at Cologne and in 1957 she joined the order she remained with for the rest of her life. In 1959 she completed gynaecology and obstetrics training in Bonn and in 1960 left Germany for India—only to change her plans in Karachi.

After committing to the leprosy project, Pfau reorganised the dispensary in line with modern medicine. In 1961 she travelled to southern India for training in the management of leprosy. In the same year the project began receiving financial support from the German Leprosy and Tuberculosis Relief Association (DAHW).

By 1963 the centre was treating 2500 patients each month. A building in the heart of Karachi was donated, triggering vehement opposition, including from some in the medical community. Despite the opposition Pfau and her team transformed the building into a modern hospital named the Marie Adelaide Leprosy Centre. Under Pfau’s leadership it became the centre for fighting leprosy, cooperating with local governments to set up treatment and control units.

In 1979 Pfau became federal adviser on leprosy to Pakistan’s Ministry of Health and Social Welfare, and in 1988 she was granted Pakistani citizenship. She was the author of nearly a dozen books about her work and her faith.

Ruth Pfau Foundation

In 1996 Pfau and the DAHW founded the Ruth Pfau Foundation. In Leipzig a secondary public school—focusing on healthcare and social work—was named after her. The list of Pfau’s honours is long and includes Pakistan’s highest civilian award, Hilal-e-Pakistan.

At the end of May 2017, Pfau stopped her professional duties, allowing her to make her eternal vow to the Society of Daughters of the Heart of Mary. Her last message, which was videotaped, concerned the state of the world and was made from her sickbed. “I am still convinced,” she said, with some effort, “that there is only one way out from our current difficulties and that is that we learn again to love each other. That is so simple. And so difficult.”

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A recent study (BMJ 2017;359:j4366) found that patients treated by female surgeons have slightly lower death rates in the first few weeks after their operation compared with patients treated by male surgeons. In a linked podcast, two of the authors of that paper discuss their findings and what they mean.

For some readers on Twitter, this looked like the intimidation tactics of a nanny state: “An imposed vaccine to go with the contract,” said Henry Stam @Stam_EM; “Doesn’t sit well that employers bully employees into a treatment,” observed Christopher Scott @Christopher_CSS; “I find this rather sinister. Am I right to?” wondered Prof Pat Tissington @tissington. Others failed to see what the problem was: “I see immunosuppressed patients every day of the week—duty of care to them includes washing my hands and having the flu jab,” said Lesley @tapidsesours.

Konrad Kangru @WhitGP, a doctor from Australia, waded into the debate to offer this perspective from a country that’s just coming out of its winter and which reported a heavy flu season, leading to warnings the UK will too. “Seriously guys? If #Influenza vax @NHSEngland is offering includes our rotten Aus ‘A’ strain for 2018 you’d be mad to forego it.” Follow the debate on Twitter @bmj_latest

The BMJ recently reported that, this winter, NHS staff who refuse the flu vaccine will have to tell their employer why (see Most read online), reigniting the longstanding debate about healthcare workers’ obligation to be vaccinated.

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FROM THE ARCHIVE

Divorce and incurable insanity

Eighty years ago, the Matrimonial Causes Act 1937 introduced new grounds for divorce, with desertion without cause, cruelty, and incurable insanity becoming legal justifications. This last reason was regularly covered in The BMJ over the following years and in 1942 the journal published a retrospective article on this new law (Br Med J 1942;2:192). “The Act has now been administered for about four years, and few will maintain that it has not on balance been very beneficial. A survey recently… [showed that] the number of cases in which the insanity ground is raised is small—only about a hundred and fifty a year out of seven thousand. Petitions on the ground of desertion are much more numerous.”

However, the article pointed out that in some respects the law needing amending. “A petition for divorce on the ground of insanity may be presented by either spouse on the ground that the other is incurably of unsound mind and has been continuously under care and treatment for at least five years immediately before the date of the petition.” Yet “care and treatment” is very precisely defined, “observes the author, “in terms that sound strange to a medical ear,” and which mean that “not every permanently insane spouse comes within the Act.” The article called for the removal of “these and other incidental defects,” but in 1969 the Divorce Reform Act removed the idea of having to prove some fault in a partner at all, allowing couples to divorce on the grounds that their marriage had irretrievably broken down.