

Emotional drivers might improve staff's hand hygiene

Campaigns that use feelings such as disgust might help to reduce healthcare associated infection better than rational strategies that teach infection prevention, writes **Layla McCay**

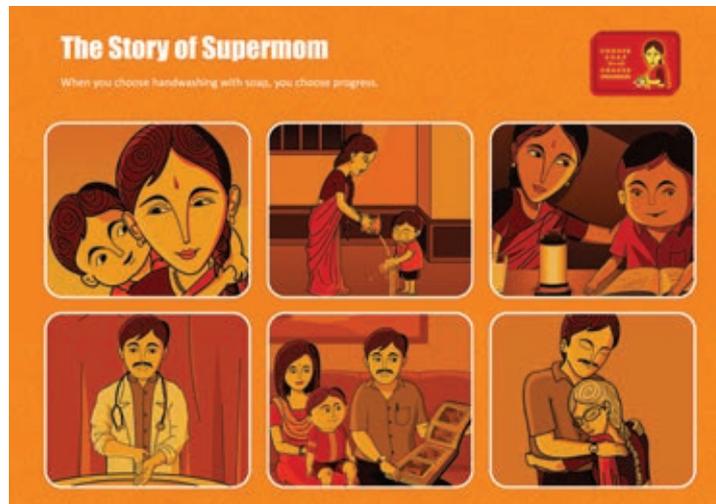
Something about articles on hand hygiene in healthcare tempts us to turn the page. Hand hygiene: that bastion of infection control, inspiration for a thousand dog-eared posters proclaiming the critical moments, creator of chapped hands, consumer of time that could otherwise be spent with patients, general guilt inducer.

We know this. We all learnt the importance of hand hygiene back in medical or nursing school. We all sat through the mandatory training and read the hospital policies. We recognise that globally 5-15% of hospital patients acquire a healthcare associated infection during their stay.¹ We have seen the studies: healthcare associated infections are being transmitted on the hands of healthcare workers all the time, whether we are measuring blood pressure,² moving around the patient area,³ or handling fluid secretions.⁴ We know all about hand hygiene.

Not sufficient to drive action

And yet, we also know that our knowledge is not sufficient to drive action. Worldwide, health workers clean their hands only 40% as often as the World Health Organization considers essential to deliver safe care⁵—and even less often in low and middle income countries.¹ Rather than ignorance or wilful negligence, hand hygiene sometimes just fails to make the cut in our subconscious cost-benefit analysis. Wards might be understaffed, clinics overfilled, and workdays long and intense, with numerous competing demands on our time. There might be no soap or running water nearby, or no convenient access to alcohol based hand rub. Even when we have adequate facilities, have read the policies and protocols, and have every aspiration to protect our patients from harm and provide high quality care, hand hygiene doesn't always make the all important transition from good intention to systematic habit.

To understand why we are not achieving safe hand hygiene in healthcare perhaps we should look beyond the hospital doors to global public health. Sure enough, we soon find an important clue: telling people that they should wash their hands to prevent infections doesn't work well.⁶ In fact, it can even be counterproductive.⁷ This raises the question of why we continue to focus efforts for improving hand hygiene in healthcare on



Handwashing promotion from the SuperAmma project doesn't mention "germs"

rational arguments, education, posters, and policies, which have only limited long term impact on human behaviour.

If rational arguments aren't enough to get us to wash our hands, then what would work? Again, we can appropriate inspiration from hand hygiene studies outside healthcare. Globally, only 19% of people wash their hands with soap at critical times at home.⁸ As good hand hygiene can prevent four in 10 cases of diarrhoeal disease⁹ and nearly a quarter of acute respiratory illnesses,¹⁰ hand hygiene is a key focus for global health practitioners.

Sizeable and lasting impact

A recent study took a new approach to increase mothers' handwashing in rural India, and the results have taken the international development community by storm.¹¹ The SuperAmma study found that using emotional motivators (disgust, nurture, status, and affiliation) to promote hand hygiene had a sizeable and lasting impact on mothers' handwashing behaviours that far exceeded the improvements achieved by most other studies, particularly those that focused on educating people about the rational benefits of handwashing on prevention of infection—the approach used so often for health professionals.

The advent of Ebola, with its accompanying flurry of fear driven handwashing, showed us that health professionals are not rational robots (with selectively faulty handwashing programs): we respond to emotional drivers. Although rationally knowing that in many parts of the world pathogens like *Clostridium*

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difficile, vancomycin resistant enterococcus, and meticillin resistant *Staphylococcus aureus* posed a far more likely risk to our patients than Ebola virus,¹² for many, it was our fear of Ebola that drove us to enact extra-meticulous hand hygiene.

The behavioural impact of fear might be temporary,⁹ but other emotional motivators last longer. To make progress on hand hygiene and reduce healthcare associated infections, we must capitalise on the fact that health professionals are not automatons; when it comes to what motivates our behaviours, we are probably not so different from those SuperAmma mothers. If we strive to identify these motivators, we can systematically augment or even replace the delivery of rational hand hygiene education in healthcare, using the latest evidence to evoke feelings of disgust around contaminated hands, appeal to the impulse to nurture those in our care, activate our human urge to conform to social norms, and achieve peer group affiliation—or some entirely different emotional motivators. Looking beyond the boundaries of healthcare, a wealth of research can potentially be applied to healthcare settings in creative, effective ways. Pinning up hand hygiene posters has got us only so far. It's time to learn from other sectors and to try something new.

Layla McCay is secretariat director, Global Public-Private Partnership for Handwashing, 1825 Connecticut Avenue NW, Washington, DC 20008, USA
laylamccay@hotmail.com

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Let's raise a glass to the ordinary sensible patient

Vagueness of some terms in the new law on consent allows for wide application in different situations

Horace Rumpole would often raise a glass to the criminals of England. They kept him busy and paid the bills. Were Rumpole a clinical negligence barrister in practice today he would toast doctors with poor skills at obtaining consent. "Lack of consent" cases form an increasing part of my medical work.

All doctors should now be able to recite the new law on consent, post-Montgomery: "I should take reasonable care to ensure that the patient is aware of any material risks involved in the treatment I'm recommending, and of any reasonable alternatives."¹⁻³

The courts have already applied the new law to a handful of cases. One case in particular, *Spencer versus Hillingdon Hospital NHS Trust*, merits mention as it relates not to the provision of information before a procedure but after.⁴

Spencer case

On 1 February 2010 David Spencer, 49, underwent a hernia repair. He was discharged from hospital that same day with a pamphlet entitled "Hernia repair—information for patients." The pamphlet advised, "If you have any problems following your discharge then please telephone the Hillingdon Hospital switchboard . . . and ask to speak to the Senior House Officer." The medical staff also told Spencer to report any problems.

As he was not deemed to be at high risk of developing deep vein thrombosis or pulmonary embolism, the hospital staff did not advise Spencer, before his discharge, of the risks of those conditions or of their signs and symptoms.

On 4 February 2010 Spencer started to feel pain in his calves. He blamed his recent inactivity. On 15 February he returned to work. His calves still hurt and he was short of breath when climbing stairs. Again, he blamed loss of fitness. On 23 April Spencer was admitted to hospital with bilateral pulmonary emboli.

The question for the High Court was whether the medical team should have given Spencer information about the signs and symptoms of deep vein thrombosis and pulmonary embolism. The trust's surgical expert told the court that it was "impossible to either ask or give advice as to every possible complication that can occur after hernia operation or anaesthetic. The list would be huge; furthermore, the patient would not be able to take such a list in."

The court referred to the *Montgomery* case and gave a revised test for the provision of information to patients after an intervention: "Would the ordinary sensible patient be justifiably aggrieved not to have been given the information at the heart of this case when fully appraised of the significance of it?"

In *Spencer's* case the judge answered yes, and the trust was found liable. Relevant factors in favour of disclosure were the potentially fatal nature of the conditions, their treatability if diagnosed early, the ease with which the information could have been given, NICE guidelines on venous thromboembolism, and the hospital's policy of treating patients undergoing general anaesthetic with pneumatic boots to reduce the risk of deep vein thrombosis and pulmonary embolism.

The judge also rejected the trust's attempt to blame Spencer for failing to report his calf pain. The symptoms arose several days after the operation in an area remote from the operation site. Spencer's belief that the pain was caused by recent lack of activity was reasonable, the judge said.

Academic lawyers and ethicists will doubtless examine the difference between the tests in the *Montgomery* and *Spencer* cases. If respect for the patient's autonomy is the underlying ethical principle, and the information withheld by the doctor may affect the patient's decision (whether to undergo a procedure or seek medical help), is there logic behind the different tests?



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From a practicable perspective, doctors who seek consent should ask themselves what a reasonable patient in the patient's position, or the particular patient in front of them, would want to know before undergoing the procedure. After the procedure, doctors should ask what an ordinary sensible patient would want to know about what might happen.

Plainly, it would be pointless and unworkable to spend 30 minutes with each patient, listing all the possible complications and the signs and symptoms of each. The judge in the *Spencer* case suggested that it would have been acceptable to provide the information in a leaflet.

Necessarily vague

In lectures, doctors have asked me for greater precision in the application of the *Montgomery* test for consent. Most recently, an ear, nose, and throat surgeon asked whether he should tell a child's parents of the risk of death from tonsillectomy. The same frustration about the vagueness of the test applies to the *Spencer* test.

The answer, simply, is that it is a matter of judgment but that the law does not demand the impossible. This is reflected in the language of reasonableness and the "ordinary sensible patient."

The terms are vague, but this allows for wide application, sensitive to the situation. Greater precision would help in some contexts but lead to odd results in others.

Doctors are used to making judgments, whether it is a decision to admit a patient or how much tissue to remove in an operation. If unsure about what to tell a patient, the prudent doctor will seek the advice of colleagues. It is an extra burden, but if it saves the life of a patient who would otherwise have died from a pulmonary embolism I will gladly raise my glass to it—to the ordinary sensible patient.

Daniel K Sokol is a barrister and medical ethicist, London Sokol@12kbw.co.uk

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• Observations: Update on the UK law on consent (*BMJ* 2015;350:h1481)

• Editorial: UK law on consent finally embraces the prudent patient standard (*BMJ* 2015;350:h2877)

NO HOLDS BARRED Margaret McCartney

The Alzheimer's "breakthrough" drug that wasn't

Our airwaves have been saturated, and the column inches heaved with the news: there's been a breakthrough. "Landmark drug to stop Alzheimer's disease has been unveiled . . . Solanezumab has been shown to slow or even halt the illness," sang the *Daily Mail*.¹

A "very excited" Eric Karran, from Alzheimer's Research UK, told the BBC: "It's the first data that we've had with the drug actually slowing down the course of the disease," adding that we could be on the verge of a "radical breakthrough."²

Channel 4 announced that "something of a breakthrough" has "been shown to produce a marked slowdown in the rate of development of the disease in some sufferers," with people taking it ending up "30% less affected by Alzheimer's than those who did not."³

And the *Daily Telegraph* said, "In a landmark announcement, pharmaceutical giant Eli Lilly said that solanezumab has been shown to put the brakes on the disease for people with mild symptoms," which "prevented mental decline by a third."⁴ Even Jeremy Hunt tweeted to congratulate Lilly on a "massive step forward."

GPs such as me are the go-to people for patients with Alzheimer's disease and their families. So it would be good to know this: is solanezumab a cure, and when will it be available? I searched the internet; there was a conference in the United States. I searched the website and found a press release: it seems that Lilly has funded research: two placebo controlled trials of solanezumab, which did not reach statistical significance on their primary endpoints.⁵ However, cognitive scores in a subgroup analysis of people with milder symptoms were purported to show benefit.

So, in an extension study, which has given rise to all of this fuss, patients in this subgroup were offered a further trial. Those previously taking placebo crossed over to the active drug, and the groups were compared. The researchers comparing cognitive function noted, "Treatment differences between the early start and delayed start groups . . . remained significant through 52 weeks."⁵ I asked Lilly what the differences were. The company sent me an interim analysis—"in press" as of 15 July—which seems to have got no attention.⁶ It contains graphs that allow com-



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parison of various cognitive instruments over time between the two groups of the extension trial. There's one that I know: the mini mental status examination, which is scored out of 30. The graph's axis runs from 0 to -8, and the difference between the two groups never exceeds 1 point.

Two other cognitive scores are ADAS-Cog14 and ADCS-iADL. Never is there a difference of more than 2 between the groups, and they are scored out of 90 and 56. These are tiny differences: they may mean nothing at all for quality of life, and they may have occurred by chance. This is no breakthrough. How did this paper score such extraordinary publicity?

Margaret McCartney is a general practitioner, Glasgow
margaret@margaretmccartney.com

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BLOG Emma Ladds

Keeping a sense of perspective

Getting into the key safe is often a major accomplishment on home visits. Once you've achieved that, you can be pretty sure you can manage what lies beyond.

Today I was going to see a patient with a brain tumour. I'd been part of her hospital admitting team and had, remarkably, come across her again during my primary care placement almost 10 months later.

She remained overwhelmingly positive, and visits always involved a joke or two. A new carer had started and had called to say that she thought Mrs B had slurred speech and could do with a medical review. I had sighed. Mrs B's speech had been slurred for days now, thanks to her cortical invader. She also had hemiplegia. Not long now. I had agreed to go and visit, though. I wanted to say goodbye.

It's that time of year again when thousands of junior doctors have

to pick up their lives and move on. More settled senior colleagues dread the impending weeks of chaos, while those responsible for organising rotas and placements work frantically to ensure everything is ready for the big reshuffle.

Perhaps the move is along a training pathway towards a long held goal, or maybe it's a sideways step into something new: a clinical fellow post, teaching, research, or another degree; maybe out of medicine altogether. Some opt to stay in the UK in the comfortable, well known NHS battleground of politics, media coverage, and patient expectation. Others, beguiled by the promise of third world challenges or first world training opportunities, head overseas.

Though it is a time of excitement—a time to look forward—it is also a time of

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immense stress and insecurity. The entirety of a life must be transported—often in just a couple of days. Rotas are rarely confirmed beforehand, contracts seem non-existent, and salaries are only ever vaguely outlined, making the process of buying or renting a house a monumental struggle. For those with relationships and families there are the added concerns of juggling a home life, schools, and another person's career, while for those without such trappings it can be a lonely, stressful enterprise.

Adding insult to injury is the overwhelming mass of HR bureaucracy and paperwork that

we must somehow negotiate while working full time. All the while our patients look on, uncomprehending and slightly bemused—who would ever design such a perplexing, inhumane system?

As I left Mrs B that day, I paused. "I may not see you again," I said.

"I'm not giving up yet, dear," she replied.

"No, no," I smiled, "I'm afraid I move to a new job in a couple of weeks." "Oh," she said sadly, lifting her paralysed right arm with the left, "Oh dear, doctor. How sad. Well, good luck. I'll miss you." A moment's hesitation, a lopsided grin, then, "Well, my left side will, anyway."

It's good to keep a sense of perspective.

Patient consent obtained.

Emma Ladds is an academic foundation year 2 doctor in Severn Deanery
emmaladds@btinternet.com