

Changes to clinician attire have done more harm than good

¹SJ Dancer, ²BI Duerden

¹Consultant Microbiologist, Department of Microbiology, Hairmyres Hospital, East Kilbride, UK; ²Emeritus Professor of Medical Microbiology, Cardiff University and former Inspector of Microbiology and Infection Control, Department of Health, London

ABSTRACT The introduction of ‘bare below the elbows’ policies to facilitate handwashing led to the disappearance of the white coat from medical and surgical wards. While rates of key healthcare acquired infections in hospitals, e.g. *Clostridium difficile* and methicillin-resistant *Staphylococcus aureus* bacteraemia, have fallen, argument continues around the contribution of hand hygiene and dress codes to these changes. Conversely, the number of complaints against clinicians continues to rise, and respect for medical staff is falling. Are these phenomena linked to the disappearance of the white coat? Here, we debate the effects of these changes to clinician attire and ask whether the putative benefits in terms of infection control are outweighed by the possible harms to the doctor-patient relationship alleged to be caused by the loss of the white coat.

KEYWORDS dress code, infection control, physician attire

DECLARATION OF INTERESTS No conflict of interests declared.

Correspondence to
SJ Dancer
Department of Medical
Microbiology
Hairmyres Hospital
East Kilbride
Lanarkshire G75 8RG
UK

e-mail stephanie.dancer@lanarkshire.scot.nhs.uk

BI Duerden
Pendle
Welsh Street
Chepstow NP16 5LU
UK

e-mail bduerden@doctors.org.uk

Removal of the white coat has done more harm than good

SJ Dancer

In December 2008, the traditional white coat was dropped under a new NHS dress code unveiled by the Government.^{1,2} Doctors were also asked to wear short sleeved shirts or blouses and remove their watches, jewellery and pens. Aside from a ‘reduced’ infection risk, it was stated that the dress code would permit patients to identify clinical staff on the wards as well as ensuring ‘good communication and delivery of care’.¹

Doctors did not receive a replacement for their iconic coat, or even a suggestion for a replacement. This probably made little difference to GPs, who leave their coats in the hospitals; or to paediatricians and psychiatrists, whose patients are frightened of white coats. For hospital doctors on the wards, however, the banning of the white coat was a different issue. The confusion and resentment lingering among our profession refuses to go away. Doctors are still upset over the loss of their white coat.³ In the past, it has allowed unprecedented access to bodily secrets and hidden fears, along with the responsibility of using that access to deliver the best care possible.⁴ Has its disappearance

compromised the doctor-patient relationship? It is time to examine the impact of the dress code and ask whether it has actually made any difference to doctors; infections; and patients.²

REASONS FOR INTRODUCING A DRESS CODE

The 2008 Code was a political gesture towards hygiene and infection control, prompted by escalating rates of hospital pathogens such as *Clostridium difficile* and methicillin-resistant *Staphylococcus aureus* (MRSA).¹ Aside from inferring a causal relationship between clinical staff and hospital-acquired infections (HAIs), the Code also ticked a number of other boxes. First, it represented a visual acknowledgement of infection control for patients and their visitors. ‘Look clean, think clean’, screamed the message. All well and good, but making the white coat a scapegoat for HAIs meant that the authorities could ignore all the other potential drivers of hospital superbugs. Crowded wards, A&E overflow, inadequate clinical staff, lack of isolation facilities, poor cleaning and disinterest in infection control all constitute a rather

costly challenge to put right.^{2,5} Lopping off all those cuffs was the easiest (and cheapest) thing to do.

Second, discarding thousands of coats meant a significant saving on laundry and stock costs. This tied in rather nicely with the ongoing centralisation of healthcare laundry services. Perhaps the only defence of the white coat ban is the fact that folk would keep the same grubby specimen for weeks so as to preserve its availability, let alone the pocket cultures.⁶

Third, the lack of immediately recognisable medical uniform meant that patients could not easily identify a doctor in the clinical vicinity.⁷ This disguised the increasing shortage of hospital doctors. Should infection control implement a ban on stethoscopes (the most prolific reservoir of pathogens known to man), it will become impossible to identify anybody with a medical degree.⁹⁻¹⁰ Fourth, shedding white coats brought relief from the sauna-like environment that characterises most hospitals. The contents of all those bulging pockets were not necessarily compliant with health, security or safety, let alone clinically useful. Handy guidelines should be committed to memory, not squirreled away in one's white coat pocket awaiting the next emergency.⁴

There was one final benefit for the policy makers. Why not remove an outdated hierarchal symbol from the 20th century? Losing the coat would assist in downgrading pesky doctors, especially those that persist in asking for yearly pay rises in line with inflation.⁷ Doctors constitute a threat towards government in that they can, and do, challenge healthcare policies of the day without political bias. Most doctors care only about restoring good health to sick patients, although the NHS framework in which we have to deliver that care frequently compromises any quality aspirations.

And so the white coat was taken away. There may well have been consultation but no one sought to defend an ill-fitting off-white bug-laden fomite gracing the wards.¹¹ Indeed, doctors tacitly accepted the view that their coats were an outdated icon and should be extinguished in the name of infection control. Let us consider what has happened to HAIs in our hospitals since the 2008 Dress Code.

HOSPITAL-ACQUIRED INFECTION TRENDS IN THE UK

Dress Code proponents argue that removing doctors' coats and ties, enforcing bare-below the elbows, and splashing out on gallons of tacky gel has led to a remarkable reduction in MRSA bacteraemia rates.¹² Given that a whole bundle of interventions was delivered, it is somewhat challenging to dissect out the strands that had most effect.¹³ What made the difference?¹⁴ Probably a little bit of everything, but there is compelling evidence

for MRSA screening as fundamental in reducing MRSA bacteraemias.¹³⁻¹⁶ As for *C. difficile*, stringent antibiotic stewardship appears to have stalled the numbers rising in hospitals.^{17,18}

The biggest problem with linking the Dress Code with diminished MRSA is the lack of any effect on rates of methicillin-susceptible *Staphylococcus aureus* (MSSA) bacteraemia, yet MRSA and MSSA are almost epidemiologically indistinguishable.^{12,13} Both inhabit human noses, cling to finger-tips, fester in dust and fly through the air at liberty on our crowded wards. Admittedly, the pocket of a white coat is a good place to hide a few staphylococci, but then so is a trouser pocket, or unruly hair, or even the name badge or key card dangling around someone's neck. It is also the case that since the overall number of MRSA acquisitions is not monitored, i.e. wound infections, pneumonia, failed joint replacements, etc., no one knows whether there really are fewer cases in our hospitals. MRSA bacteraemias represent only the tip of the acquisition iceberg.¹³

Was removal of the white coat, and associated hygienic gestures, a key component of declining pathogen rates? No, it was not. If there was an association between the Dress Code and HAI rates, then there would have been a simultaneous reduction of all hospital pathogens, and this has simply not occurred.¹³ Falling MRSA and *C. difficile* rates merely vacated a space for some noteworthy replacements, including vancomycin-resistant enterococci and the virtually untreatable carbapenem-resistant coliforms.^{19,20} Norovirus, the original 'winter vomiting' disease, has now become the 'all-year-round-vomiting' disease, with not a white coat in sight.²¹ The same applies to the Herculean efforts at encouraging hand hygiene, imposed years before MRSA rates showed any sign of dissipating.^{13,22} Clearly the enormous focus on HAIs succeeded for target pathogens, but it wasn't due to stripping doctors of their coats or stalking them until they hit the nozzle of the nearest gel container.

There are, of course, no white coats in the community, where home-acquired *C. difficile* rates are currently rising.²³ The science may not be particularly robust but one can infer, perhaps, that the increasing number of patients presenting to their GPs with community-associated *C. difficile* cannot be due to malevolent white coats loitering in the bushes, naked forearms or any other dress code component.

IMPORTANCE OF HYGIENE

The removal of the coat upset the status quo. Nature abhors a vacuum, and in this case, due replacement was not necessarily a nice smart uniform or ample supply of well-fitting scrubs, but a sort of 'dress decay' for doctors, particularly noticeable for juniors fresh out of medical school.^{24,25} Without barrier protection, all clothes

potentially take hospital pathogens home to the family, however smart. At least one could discard a coat into the linen trolley at the end of the shift along with all those nasty superbugs. Personal hygiene practices stay the same despite choice of apparel, including the white coat; medics are notoriously bad at cleaning their hands whatever they are wearing.²⁶

Many doctors do not understand the definition of 'clean' because they haven't been taught the basics at medical school. This merely reflects the current societal status of hygiene.²⁵ Infection control lost its way following the advent of antibiotics because any hygiene deficits could be ameliorated by a dose of *wundermycin*.²⁷ Maybe the biggest problem, reflecting past miasmas, is that people can't actually see germs with the naked eye. Around a quarter of us have *S. aureus* firmly ensconced in the nasal passages; hence doctors – and whatever they wear – are not bacteriologically sterile.^{28,29} Regenerating interest in hygiene in the 21st century needs a cataclysmic shift in societal opinion, which may occur only when untreatable infections threaten to overwhelm our communities.³⁰ There is currently a horrifying example of this in the global village.^{31,32}

EROSION OF STATUS

The white coat was, and still is, a universally recognised emblem of the medical profession. Brighter-than-white, it symbolised life and hope; scientific achievement; and visual evidence of cleanliness. But aside from infection risk, was the white coat ditched in order to strip doctors of their aura of godliness? Patients themselves usually prefer physicians in professional attire with a white coat.^{33,34} A clean, neat appearance invites personal confidences; smart dress instils confidence. Isn't this what we want, and need, to provide our patients with the very best of care? Dishevelled dress could erect a barrier every bit as socially intimidating as a white coat may have done.

The coat demarcated the professional barrier between physician and patient. This barrier cloaked the physician with a sense of authority but also reminded physicians of their professional responsibilities.⁴ Does today's casual attire embody those values? Clothing is one of the most important factors that inspire patient confidence in physicians.³⁵ The disappearance of the white coat may have challenged the dignity of doctors but it has also challenged the dignity of patients.

Most doctors would not have an ideological objection to wearing uniforms as long as the policy was fair across

the grades.³⁶ The design should reflect authoritative clinical care and not just another lever for NHS corporatisation.³⁶ Doctors are among the most highly qualified segment of society, having studied for years to attain the knowledge needed to practice medicine, often sacrificing sleep, social life and family in the process. Did the white coat not infer those sacrifices, made over and over again, during a professional lifetime?

Banning the white coat may well have demeaned the status of the medical profession.³ Patient complaints to the GMC about doctors doubled between 2007 and 2012.^{37,38} Now there is a drive in progress to promote 'values-based recruiting' in the NHS; were these not the values embodied by the white coat? The money saved from laundering white coats has soiled the shine of NHS quality practice.

CONCLUSION

Doctors should have a right to choose their attire, so long as it is smart, clean and engenders respect for their patients, for themselves, and for the society that they serve. If their choice is a white coat, with 'cuffs-above-the-wrist', what's the problem? The white coat is, or certainly was, a symbol of knowledge, compassion and honour. It provided a standard against which doctors were duty bound to measure their every act of care to the patients who trusted them.²⁴

The coat protected the wearer from ever present pathogens, aerosols, spatter and spillages. It survived the rigours of daily laundering, although costs and practicalities of this today would be the subject of another debate. Should health boards provide a uniform for doctors? Yes, if it helps patients recognise who exactly is a doctor, and yes, if the choice of apparel looks smart, clean and dignified. The disappearance of the white coat irrevocably harmed the status of the medical profession. We can find solace in the fact that the debate has at least triggered a re-evaluation of infection control, including the meaning of purity, cleanliness and patient safety. The white coat represents all of the latter as well as encapsulating responsibility and trust between doctor and patient. Wear it if you want to. If you do, remember what it stands for and be proud.³

Acknowledgements

The author wishes to acknowledge Professor Alasdair Geddes for reigniting the white coat debate. The views expressed in this article are the author's own and do not necessarily reflect those of NHS Lanarkshire.

REFERENCES

- 1 BBC News. 16 December 2008. *Doctor's white coat to be banned*. <http://news.bbc.co.uk/1/hi/scotland/7784552.stm> (accessed 18/11/2014).
- 2 Dancer SJ. Pants, policies and paranoia. *J Hosp Infect* 2010; 74: 10–15. <http://dx.doi.org/10.1016/j.jhin.2009.10.012>
- 3 Burd A. Bring back the white coat. *BMJ blog*, 29 July 2010. <http://blogs.bmj.com/bmj/2010/07/29/andrew-burd-bring-back-the-white-coat/> (accessed 18/11/2014).
- 4 Lawrence L. The white coat – a universally recognized medical uniform. *Endocrine Today*, February 2009. <http://www.healio.com/endocrinology/news/print/endocrine-today/%7B1d4ddd82-f39f-4d4c-a87e-613200baf318%7D/the-white-coat--a-universally-recognized-medical-uniform> (accessed 18/11/2014).
- 5 Anon. (2008) Invest to beat the bugs. *BMA News* 2008; 27.
- 6 Banu A, Anand M, Nagi N. White coats as a vehicle for bacterial dissemination. *J Clin Diagn Res* 2012; 6: 1381–4. <http://dx.doi.org/10.7860/JCDR/2012/4286.2364>
- 7 Brown AM. Is it time the NHS brought back white coats for doctors whatever the bossy managers say? *The Telegraph*, 7 September 2010. <http://blogs.telegraph.co.uk/news/andrewmcbrown/100052649/is-it-time-the-nhs-brought-back-white-coats-for-doctors-whatever-the-bossy-managers-say/> (accessed 18/11/2014).
- 8 Gerken A, Cavanagh S, Winner HI. Infection hazard from stethoscopes in hospital. *Lancet* 1972; 299: 1214–5.
- 9 Marinella MA, Pierson C, Chenoweth C. The stethoscope. A potential source of nosocomial infection? *Arch Intern Med* 1997; 157: 786–90.
- 10 Longtin Y, Schneider A, Tschopp C et al. Contamination of stethoscopes and physicians' hands after a physical examination. *Mayo Clin Proc* 2014; 89: 291–9. <http://dx.doi.org/10.1016/j.mayocp.2013.11.016>
- 11 Taccconelli E. When did the doctors become fomites? *Clin Microbiol Infect* 2011; 17: 794–6. <http://dx.doi.org/10.1111/j.1469-0691.2011.03499.x>
- 12 Stone SP, Fuller C, Savage J et al. Evaluation of the national Cleanyourhands campaign to reduce *Staphylococcus aureus* bacteraemia and *Clostridium difficile* infection in hospitals in England and Wales by improved hand hygiene: four year, prospective, ecological, interrupted time series study. *BMJ* 2012; 344: e3005. <http://dx.doi.org/10.1136/bmj.e3005>
- 13 Dancer SJ. It's not just about hand hygiene. Rapid response, *BMJ*; 2012. Available at: <http://www.bmj.com/content/344/bmj.e3005/rr/588527> (accessed 18/11/2014).
- 14 Dancer SJ. Everything has made the difference: a reply to Dr Elston. *J Hosp Infect* 2010; 75: 136–7. <http://dx.doi.org/10.1016/j.jhin.2010.03.002>
- 15 Lawes T, Edwards B, López-Lozano JM et al. Trends in *Staphylococcus aureus* bacteraemia and impacts of infection control practices including universal MRSA admission screening in a hospital in Scotland, 2006–2010: retrospective cohort study and time-series intervention analysis. *BMJ Open* 2012; 2: e000797. <http://dx.doi.org/10.1136/bmjopen-2011-000797>
- 16 Sarma JB, Marshall B, Cleeve V et al. Impact of universal screening on MRSA bacteraemias in a single acute NHS organisation (2006–2012): interrupted time series analysis. *Antimicrob Resist Infect Control* 2013; 2: 2. <http://dx.doi.org/10.1186/2047-2994-2-2>
- 17 Dancer SJ, Kirkpatrick P, Corcoran DS et al. Approaching Zero: Temporal effects of a restrictive antibiotic policy on hospital-acquired *Clostridium difficile*, ESBL-producing coliforms and MRSA. *Int J Antimicrob Agents* 2012; 41: 137–42. <http://dx.doi.org/10.1016/j.ijantimicag.2012.10.013>
- 18 Health Protection Scotland. *Quarterly Surveillance Report on the Surveillance of Clostridium difficile infection (CDI) in Scotland*. Glasgow: Health Protection Scotland; 2014. <http://www.hps.scot.nhs.uk/haic/sshqip/publicationsdetail.aspx?id=50174> (accessed 18/11/2014).
- 19 O'Connell NH, Power L, O'Gorman A et al. Against the onslaught of endemic carbapenemase-producing *Klebsiella pneumoniae*, the war is being lost on the Irish Front. *J Hosp Infect* 2014; 87: 247–8. <http://dx.doi.org/10.1016/j.jhin.2014.05.011>
- 20 Werner G Coque TM, Hammerum AM et al. Emergence and spread of vancomycin resistance among enterococci in Europe. *Euro Surveill* 2008; 13: pii: 19046.
- 21 Lopman B, Vennema H, Kohli E et al. Increase in viral gastroenteritis outbreaks in Europe and epidemic spread of new norovirus variant. *Lancet* 2004; 363: 682–8.
- 22 Dancer SJ. Control of transmission of infection in hospitals requires more than clean hands. *Infect Control Hosp Epidemiol* 2010; 31: 958–60. <http://dx.doi.org/10.1086/655838>
- 23 Taori SK, Wroe A, Hardie A et al. A prospective study of community-associated *Clostridium difficile* infections: the role of antibiotics and co-infections. *J Infect* 2014; 69: 134–44. <http://dx.doi.org/10.1016/j.jinf.2014.04.002>
- 24 Hochberg MS. The Doctor's White Coat – an Historical Perspective. *Virtual Mentor* 2007; 9: 310–4. <http://dx.doi.org/10.1001/virtualmentor.2007.9.4.mhst1-0704>
- 25 Dancer SJ. Put your ties back on: scruffy doctors damage our reputation and indicate a decline in hygiene. *BMJ* 2013; 346: f3211. <http://dx.doi.org/10.1136/bmj.f3211>
- 26 Sladek RM, Bond MJ, Phillips PA. Why don't doctors wash their hands? A correlational study of thinking styles and hand hygiene. *Am J Infect Control* 2008; 36: 399–406. <http://dx.doi.org/10.1016/j.ajic.2007.11.002>
- 27 Loeffler IJP. Microbes, chemotherapy, evolution, and folly. *Lancet* 1996; 348: 1703–4.
- 28 Paul R, Das NK, Dutta R et al. Bacterial contamination of the hands of doctors: A study in the medicine and dermatology wards. *Indian J Dermatol Venereol Leprol* 2011; 77: 307–13. <http://dx.doi.org/10.4103/0378-6323.79700>
- 29 The Front Door to Healthcare. *Professionals should dress professionally*. 11 July 2013. <http://frontdoor2healthcare.wordpress.com/2013/07/11/professionals-should-dress-professionally> (accessed 18/11/2014).
- 30 Dancer SJ. Next to cleanliness. *BMJ* 2008; 336. <http://dx.doi.org/10.1136/bmj.39455.595255.47>
- 31 Jozwiak G. Ebola crisis in Liberia brings rumours, hygiene lessons and hunger. *The Guardian*, 9 August 2014. <http://www.theguardian.com/society/2014/aug/09/liberia-monrovia-ebola-rumours-hygiene-hunger> (accessed 18/11/2014).
- 32 Edmond MB, Diekema DJ, Perencevich EN. Ebola virus disease and the need for new personal protective equipment. *JAMA* 2014; Epub ahead of print 28 October 2014. <http://dx.doi.org/10.1001/jama.2014.15497>
- 33 Rehman SU, Nietert PJ, Cope DW et al. What to wear today? Effect of doctor's attire on the trust and confidence of patients. *Am J Med* 2005; 118: 1279–86.
- 34 Douse J, Derrett-Smith E, Dheda K et al. Should doctors wear white coats? *Postgrad Med J* 2014; 80: 284–6.
- 35 Kurihara H, Maeno T, Maeno T. Importance of physicians' attire: factors influencing the impression it makes on patients, a cross-sectional study. *Asia Pac Fam Med* 2014; 13: 2. <http://dx.doi.org/10.1186/1447-056X-13-2>
- 36 Ellis O. The return of the white coat? *BMJ Careers*, 1 September 2010. http://careers.bmj.com/careers/advice/view-article.html?id=20001364&q=w_bmj (accessed 18/11/2014).
- 37 Rimmer A. (2014) Why are more patients complaining about their doctors? *BMJ Careers*, 29 July 2014. <http://careers.bmj.com/careers/advice/view-article.html?id=20018642> (accessed 18/11/2014).
- 38 Archer J, Regan de Bere S, Bryce M et al. (2014) *Understanding the rise in Fitness to Practise complaints from members of the public*. Plymouth University Peninsula Schools of Medicine and Dentistry, 30 January 2014. http://www.gmc-uk.org/static/documents/content/Archer_et_al_FTP_Final_Report_30_01_2014.pdf (accessed 18/11/2014).

Why we should have a clinical dress code for doctors

BI Duerden

During the seven years (2004–2010) when I was Inspector of Microbiology and Infection Control at the Department of Health, two major policy initiatives caused argument, criticism and debate among medical colleagues – the setting and performance management of targets for the reduction in the numbers of MRSA bacteraemias and *Clostridium difficile* infections, and the introduction of a clinical dress code for medical staff (widely and colloquially known as ‘bare below the elbows’). Whatever the view of the target culture in the English NHS during the 2000–2010 decade, there has eventually been general agreement that within that management ethos, the only way to get the necessary attention and focus on the prevention and control of healthcare associated infections was to have targets for which Chief Executives were held accountable. That debate is now past, but the question of whether medical staff, particularly consultant staff, should be required to adopt a dress code appropriate to the delivery of safe clinical care still provokes some heated debate.

The dress code was implemented in England from 2007 onwards as part of a raft of measures to help reduce the unacceptably high numbers of healthcare associated infections and to raise the profile of infection prevention and control among NHS staff, patients, relatives and the general public. It had always surprised me that although other healthcare professionals were required to wear a uniform appropriate to their clinical duties and to follow a dress code in relation to jewellery, watches etc., this did not apply to doctors. We all see equivalent dress codes in many workplaces – from hard hats and steel-capped boots on building sites to aprons, hats and gloves on supermarket deli and fish counters. We accept and expect this approach to clothing to protect the individuals and the people they serve – why should doctors be different?

In my younger days, we all wore white coats over our ordinary day clothes (junior staff and most consultants) and male doctors were expected to wear a tie. The white coat fell into disuse, quite rightly, during the 1980s and 90s, as it was realised it was inappropriate for performing clinical procedures and could be implicated in transmitting contamination from one patient to another. For contact procedures where cross-contamination is a potential risk, disposable aprons and gowns and gloves became the standard wear, protecting both the patient and the doctor. This meant that what doctors wore on wards and in clinics was up to them as

individuals, except in specialist units such as intensive care where many had adopted a uniform based on surgical scrubs as being most appropriate to the work they were doing.

The proposal for a more standardised dress code to promote safe clinical practice in relation to infection prevention and control, in particular good hand hygiene, came not from anonymous Department of Health officials with no knowledge of clinical practice but from a group of the most senior medical and nursing officers in the Department, of which I was one, with the support and endorsement of our then Minister of Health in the House of Lords, Lord Darzi, an eminent and respected cancer specialist. The code has four elements: no white coats or jackets; a shirt, blouse or equivalent with short sleeves; no ties that could contact with the patient or surroundings or interfere with a clear view of the patient; no wrist jewellery, wristwatch or rings other than a plain wedding ring. For contact procedures where contamination and cross-infection are a risk, a disposable gown or apron and gloves should be worn – and changed with hand hygiene performed between each patient.

The final demise of the white coat attracted little attention or comment. However, the short-sleeved shirt became the focus for commentary on the code as it was promoted as the ‘bare below the elbows’ requirement. This phrase was never used by those of us who proposed the code but was seen as catchy ‘jargon’ by press and publicity staff charged with getting the message out to clinicians, managers and the general public. I was challenged on numerous occasions to quote the scientific evidence – the double-blind clinical trials as done for new drugs – that long sleeves caused cross-infection. Of course, there is no such evidence but the question misses the point. It is not the potential transmission of infection by sleeve cuffs that is the risk but the fact that long sleeves inhibit correct hand washing/hand hygiene practice. There is no dispute that hand hygiene is an essential (probably the most important) infection prevention and control procedure or that proper hand washing should include the whole of the hands (fingers, palms, backs) AND the wrists. It is a matter of simple observation by those who have had to watch and audit hand hygiene that people wearing long sleeves do not generally wash their hands properly; they stop short of the wrist, otherwise they wet their shirt cuffs. This was, and is, the simple reasoning behind

the requirement for short sleeves – and the elbow was a simple cut-off between the upper and lower arm to indicate what was meant by short sleeves.

The third requirement, to remove ties, has a similar simplicity of reasoning. There have been several studies over the years showing that ties (which are rarely washed) become contaminated with a variety of bacteria, including potential pathogens, but these have not necessarily shown cases of cross-infection linked to ties. However, the potential is there and, moreover, they get in the way of clinical examination and clinical procedures. The easiest approach to this is for staff engaged in clinical duties not to wear ties, although it is generally considered acceptable for a tie to be tucked into the shirt high up the chest, particularly for those with intermittent patient contact or when direct contact is unlikely. A further alternative, of course, for those colleagues who abhor the open neck is a bow tie.

The fourth requirement to remove wrist jewellery, watches and rings (other than a plain wedding ring), which has been an established requirement of nurses and other healthcare staff for many years, engendered some opposition. There were few comments about rings. There have been studies showing that rings harbour bacteria, even after vigorous hand washing, and they are also an impediment to clinical examination and procedures. The acceptance of a plain wedding ring is a compromise; bacteria can still survive beneath the ring, but the smooth surface cleans easily and it is an item that many staff across the healthcare professions would not be happy to remove on a regular basis. Similarly with the ban on wrist jewellery, there was little opposition, except for some colleagues who insisted that a wristwatch is an essential part of their personal equipment. The reason for requiring bare wrists is the same as for wearing short sleeves – simple observation shows that people wearing wristwatches or other

jewellery tend not to wash their hands properly; they stop short of the wrist, so proper hand hygiene is compromised. Although clinical examination and procedures may need timing (as in measuring a patient's pulse rate) there is no absolute need to have a watch on the wrist. Most wards and clinic areas have large wall clocks. Moreover, for personal use, doctors can use a pocket watch (a long tradition), a fob watch pinned to clothing as has been used by nursing staff for many years, or simply hook a wrist watch onto a belt or waistband loop.

I did anticipate that when the code was introduced there might have been concerns from some religious groups that the dress requirement would conflict with that of their religion. We had several meetings with Muslim representatives – religious leaders and medical staff – and reached amicable agreement. They recognised the overriding requirement for patient safety and good clinical practice and we agreed that the length of sleeve to enable good hand hygiene was well above the wrist but not necessarily fully above the elbow. The Muslim leaders stressed to us how important hand washing is in their religious practice so there was common ground in what we were seeking to achieve. In some other religious groups, such as Sikhs, there is a requirement to wear a wrist band all the time – but we established that this could be so high up the lower arm that it would not constitute a 'wrist' band, and, again, not interfere with hand hygiene.

The dress code has not been an issue for most junior medical staff; it gave greater emphasis to what had become their normal working dress. I hope that senior staff can increasingly see that its aim is to promote good, safe clinical practice. It is not meant to make them less 'smart' in the eyes of their patients – it is to have them dressed appropriately for the work they are doing for those patients