LETTERS

Letters are selected from rapid responses posted on bmj.com. After editing, all letters are published online (www.bmj.com/archive/sevendays) and about half are published in print To submit a rapid response go to any article on bmj.com and click "respond to this article"

WHEN MANAGERS RULE

We need aggregated data on bullying in the NHS

Jarman rightly highlights concerns about systemic bullying in the NHS in England.¹
His references to independent US evidence, corroborating UK experience,^{2,3} in the context of the Mid-Staffordshire Inquiry, are particularly important. Having given evidence to that inquiry,⁴ I believe that bullying, often associated with victimisation of whistleblowers, is widespread and its impact underestimated.

The reasons are complex and multifactorial and cannot simply be attributed to one change, however important, implemented 30 years ago. Many later developments (not least the introduction of competition, privatisation, constant reorganisation, and relentless political targets) have contributed to unacceptable behaviour patterns that most professional managers deplore. Managers are often subject to such abuse and many have consequently left the service.

Jarman forgets that, since 1983, many general managers have been medically or clinically qualified. Since then, GPs have played key roles in commissioning and medical directors have been universal. Why have they not challenged the obviously dysfunctional autocratic culture? The General Medical Council has disciplined medically qualified managers who failed to protect the interests of patients. It must continue to do so. Existing voluntary management codes do require teeth but, in my view, can be effective only if NHS management becomes truly independent of the Department of Health

Sadly, my contact with victims leads me to conclude that the BMA is part of the problem. It treats each successive case as an isolated employment issue. If it reflected on its experience and published aggregated data, preferably together with other representative organisations, we might get a more accurate picture of the evidence based reasons for this deeply worrying problem.

David Michael Hands visiting professor in health policy and management, University of Glamorgan, Pontypridd CF37 1DL, UK

davidmhands@hotmail.com

Competing interests: DMH is a former chief executive of North Wales Health Authority and of NHS Trusts and health authorities in England. He is married to a former medical

director and has worked with several people who have personal experience of bullying in the NHS.

- Jarman B. When managers rule. *BMJ* 2012;345:e8239. (19 December)
- 2 Patients First. www.patientsfirst.org.uk.
- 3 Medical Harm. www.medicalharm.org.
- 4 Mid-Staffordshire NHS Foundation Trust Public Inquiry. Witness statement of Professor David Hands, 27 Sep 2011.

Cite this as: BMJ 2013;346:f209

Making the patient the main focus

Jarman's most disturbing comment is the reliance on "shame and blame" and fear of job loss to drive quality improvement in the NHS.¹

Quality improvement guru W Edwards Deming would have deemed these "deadly diseases" that are bad for organisations and the people they serve. Lack of constancy of purpose, emphasis on short term profits, and running on the basis of visible figures alone, all cause serious problems. Similarly, blind reliance on technology can be counterproductive, as can placing blame on workforces rather than management systems.

We need an alternative paradigm, particularly for non-clinical management. The ISO 9000 series defines standards for quality management. Cindy Jimmerson has also defined the point of a healthcare system as delivering what the patient wants and needs, defect free; customised to each individual patient; on demand, exactly as requested; with an immediate response to problems or changes; with no waste; and in an environment safe for patients, staff, and clinicians (physically, emotionally, and professionally).

This definition makes the patient the principal focus. The EFQM model of excellence may be useful to implement change with its markers for "excellent organisations" such as leaders who "inspire people and create a culture of involvement, ownership, empowerment, improvement and accountability through their actions, behaviours."

If we move from the culture of fear, shame, and blame towards a more excellent way, the NHS will be better for its patients and staff. It is also far more likely to have embedded continual improvement in all departments, with a consequent decrease in waste and increase in effectiveness. That is worth striving for.

Philip Pearson consultant respiratory physician, Plymouth Hospitals, Derriford Hospital, Plymouth PL6 8DH, UK ppearson@nhs.net

Competing interests: None declared.

- Jarman B. When managers rule. BMJ 2012;345:e8239. (19 December.)
- 2 Deming WE. Out of the crisis. MIT Center for Advanced Engineering Study, 1986.
- 3 BSEN ISO 9000:2005. Quality management systems. Fundamentals and vocabulary. http://shop.bsigroup.com/en/ProductDetail/?pid=00000000030093429.
- 4 EFQM. EFQM excellence model. www.efqm.org.

Cite this as: BMJ 2013;346:f244

Clinical leadership is paramount

Jarman highlights the need to refocus on the quality of patient care and the importance of clinicians leading in the NHS. Darzi, in his review, ² defined quality as clinically effective, personal, and safe, and reintroduced the concept of clinical leadership as crucial to this vision. He envisaged that "a lot of clinicians will now be responsible and will have tremendous powers within the system," 3 thereby associating a clinically driven NHS with improved quality of patient care and safety. Kaiser Permanente achieved efficiency and improved quality of patient care and outcomes through making clinical leadership central to its reform agenda. 4 However, at the most crucial of times, clinical leadership in the NHS is patchy at best, misinterpreted, and unsatisfactory.

Clinical leadership has been described as "leadership needed to transform the performance of the health systems that must



BMJ | 19 JANUARY 2013 | VOLUME 346

come principally from doctors and other clinicians—whether or not they play formal management roles," thereby distinguishing it from clinical management. If quality is truly desired, clinical leaders must steer away from herd-like thinking or safe opinion and lead the way in strategy, policy development, and implementation that is based on information and evidence. It is time to achieve the ultimate goal of patients and clinicians being at the centre of decision making; otherwise the vision of quality and clinical leadership will remain "the emperor's new clothes."

Shanaya Rathod consultant psychiatrist, Southern Health NHS Foundation Trust, Tatchbury Mount, Southampton SO40 2RZ, UK shanayarathod@nhs.net

Competing interests: None declared.

- 1 Jarman B. When managers rule. *BMJ* 2012;345:e8239. (19 December.)
- Department of Health. High quality care for all. NHS next stage review final report. 2008. www.dh.gov. uk/en/Publicationsandstatistics/Publications/ PublicationsPolicyAndGuidance/DH_085825.
- 3 Gainsbury SE. Dazi turns up the heat on clinical leadership. Health Serv J 2008 June 30. www.hsj.co.uk/ news/darzi-turns-up-heat-on-clinical-leadership-andtraining/1675957 article.
- 4 Light D, Dixon M. Making the NHS more like Kaiser Permanente. *BMJ* 2004;328:763-5.
- Mountford J, Webb C. Clinical leadership: unlocking high performance in healthcare. McKinsey, 2008.

Cite this as: BMJ 2013;346:f213

TOMORROW'S WORLD

The jury is still out on the safety of silver nanoparticles

Clement's proposals for using silver nanoparticles, which have antibacterial properties, in doctors' clothing are interesting, but their use in uniforms on a daily basis is of concern.

The physicochemical properties of nanoparticles have led to interest in their potential uses in consumer and industrial products, but we need a better understanding of their physiological effects. Current safety evaluations of these materials are lacking and the available data are conflicting. The research is still in its embryonic stages and has only recently begun to understand what needs to be considered when assessing the hazards that nanoparticles may pose.²

Furthermore, these ultrafine particles may have cytotoxic and genotoxic effects, through a process of oxidative stress, ³ although these biological responses depend greatly on the physicochemical characteristics of the material. Dermal exposure is thought to be less harmful than ingestion or intravenous administration, but the long term effects of exposure to silver nanoparticles, especially whole body exposure, are unclear. The potential effects on immunocompromised and highly

allergic patients who come into contact with doctors wearing such clothing should also be considered.

In these times of economic hardship, would it be feasible to mass produce doctors' uniforms impregnated with nanoparticles, especially one as elaborate as that suggested? Although the uniform could double up for fancy dress parties, it is essential that nanoparticles don't leach into the environment during washing or after disposal because of effects on the microbial compartments in these ecosystems. Surely, sticking to tried and tested infection control by means of hand washing is the safer option.

Hasan N Haboubi Welsh core academic trainee, gastroenterology h.n.y.haboubi@swansea.ac.uk Shareen H Doak reader in nanogenotoxicology Gareth J Jenkins professor of molecular carcinogenesis, DNA Damage Research Group, Institute of Life Sciences, School of Medicine, Swansea University, Swansea SA2 8PP, UK Competing interests: None declared.

- 1 Clement R. Is it time for an evidence based uniform for doctors? BMJ 2012;345:e8286. (18 December.)
- Singh N, Manshian B, Jenkins GJ, Griffith SM, Williams PM, Maffeis TG, et al. NanoGenotoxicology: the DNA damaging potential of engineered nanomaterials. *Biomaterials* 2009;30:3891-914.
- Doak SH, Manshian B, Jenkins GJ, Singh N. In vitro genotoxicity testing strategy for nanomaterials and the adaptation of current OECD guidelines. *Mutat Res* 2012;745:104-11.

Cite this as: BMJ 2013;346:f227

Cosmic radiation may cause dementia

Although space tourism, ¹ ² cooking in space, ² and ferrying cows (for biofuel and food purposes) ² to space are wonderful ideas, new research data show that galactic cosmic radiation might be more cause for concern than previously thought. Ionising radiation is known to cause cancer, ¹ but recently published data suggest that acute exposure to such radiation can lead to cognitive impairment and increased Aβ amyloid plaque formation long after original exposure.

Researchers subjected a mouse model of Alzheimer's disease to acute exposure (100 cGy—cumulative dose similar to that which astronauts might be exposed to in deep space) with 56Fe (a high energy highly charged particle found in space). These animals developed cognitive impairment and increased Aβ amyloid plaque formation long after initial exposure compared with control mice exposed to sham radiation.³ Thus, there is an increased chance of incapacitating dementia occurring long after a space mission. However, the manner in which the central nervous system responds to the chronic and complex low dose cosmic radiation of space is still unknown.¹

Biji T Kurien associate professor of research, University of Oklahoma Health Sciences Center, 1100 N Lindsay, Oklahoma City, OK 73104, USA biji-kurien@ouhsc.edu

Competing interests: None declared.

- Grenon SM, Saary J, Gray G, Vanderploeg JM, Hughes-Fulford M. Can I take a space flight? Considerations for doctors. *BMJ* 2012;345:e8124. (13 December.)
- 2 Kurien BT, Dorri Y, D'Souza A, Scofield RH. Four men in a space station—to say nothing of the cow! The quest for finding respite and work in the ultimate frontier. Med Hypotheses 2007:68:1195-9.
- 3 Cherry JD, Liu B, Frost JL, Lemere CA, Williams JP, Olschowka JA, et al. Galactic cosmic radiation leads to cognitive impairment and increased Aβ plaque accumulation in a mouse model of Alzheimer's disease. PLoS One 2012;7:e53275.

Cite this as: BMJ 2013;346:f225

THE TOOTH FAIRY AND MALPRACTICE

Cost of tooth fairy on the rise

Losing milk teeth has also proved to be a profitable business for children. A recent study in the UK found that 70% of parents pay at least £1 ($ext{ }$ 1.6) per milk tooth for tooth fairy visits. The value of milk teeth has steadily increased in the past 50 years, from an average of £0.15 in the 1960s to £1.50 today.

The study showed that parents in Yorkshire are the biggest tooth fairy advocates, with over 76% paying at least £1 per tooth. By comparison, parents in the West Midlands are the most unwilling teeth traders, with about one in 20 (6%) paying nothing.¹

In the US, the average tooth fairy payout was \$2.60 in 2011. Not only is the tooth fairy boundlessly generous, she is also inconsistent. Children of divorced parents report getting \$10 at mom's house and a Star Wars action figure at dad's.²

The tooth fairy is one of the hardest working employees in the country. An estimated 15 million milk teeth fall out each year, making an average of 42 000 "money drops" a night, totalling well over £16m a year.³

In all seriousness, there is a message here. You can enhance lost tooth safety by placing the precious enamel in a small container or envelope before slipping it under your child's pillow. That way the tooth cannot find its way into any orifice. 4

C Albert Yeung consultant in dental public health, NHS Lanarkshire, Kirklands, Bothwell G71 8BB, UK albert.yeung@lanarkshire.scot.nhs.uk

Competing interests: None declared.

- Dental Tribune International. As much as £10+ a day: British parents pay kids to brush their teeth. 2012. www. dental-tribune.com/articles/content/scope/news/region/ uk/id/11067.
- 2 August DA. The tooth fairy: a cautionary tale. *Anesthesiology* 2012;117:1386-8.
- 3 British Dental Health Foundation. Tooth fairy business tops £16 million. 2011. www.dentalhealth.org/news/ details/481
- 4 Ludman S, Daya H, Richards PS, Fox A. The tooth fairy and malpractice. BMJ 2012;345:e3027. (13 December.)

Cite this as: BMJ 2013;346:f237