

# Don't follow your leader: challenging erroneous decisions

*This article provides insight into how medical students and doctors at all levels can challenge decisions with a view to improving patient safety, discusses some of the difficulties and barriers in so doing, some of the underpinning reasons behind this and the important role of followership.*

A series of reports into failings in the NHS, including the Francis report (2013), the Keogh review (2013) and more recently the Berwick report (2013), have highlighted the role of leadership in establishing successful organizations with a culture that meets the public's expectations for high standards of compassionate care. Indeed, one of the recommendations of the Francis report states the need for 'strong and stable leadership in stable organisations' (Francis, 2013).

The Darzi review (2008) focused heavily on teasing out the qualities and requirements for successful health-care leadership. All the above reviews also emphasize the important role of medical students and doctors in training in foregrounding patient safety. Although the concept of 'followership' has traditionally received less attention and the word followership only appears once in the full Francis report, the concept of effective followership implicitly pervades the recommendations. The Medical Leadership Competency Framework is now being revisited by the NHS Leadership Academy and developed into a leadership framework for all practitioners in the NHS. It seems likely that the underlying philosophy of distributed leadership that characterized the original framework will be maintained. In models of distributed (shared or dispersed) leadership, the requirement on the team, as distinct from the leaders of that team, to take responsibility for patient safety and health improvement is paramount.

Ever since the landmark study by Milgram (1963), which examined the willingness of people to obey orders even when they thought they were actively harming people, there has been interest in many fields in the causes of failure to challenge authority and the potential damaging consequences of such failure. In medicine, which is a highly hierarchical system, this lack of challenge is a component of communication failures and a major cause of preventable patient harm and death (Kohn et al, 2000; Cosby and Croskerry, 2004; Firth-Cozens, 2004; Lingard et al, 2004; Sutcliffe et al, 2004; Makary et al, 2006; Belyansky et al, 2011). If we are to improve patient safety then it is vital that students and doctors in training are enabled and equipped with the skills and confidence to challenge perceived authority when working in health-care teams while maintaining good working relation-

ships. The ability for doctors to work effectively in teams is highlighted from the start of the educational process. For example, in *Medical students: professional values and fitness to practise*, the General Medical Council states that medical students should: 'develop and demonstrate teamwork and leadership skills' (General Medical Council, 2007).

Although the traditional view of a team worker may be one of providing support for a leader, there are numerous instances where failure on the part of a team worker to challenge an erroneous decision by the leader led to an adverse outcome (Cosby and Croskerry, 2004; Gladwell, 2008; Bromiley, 2009). In contrast, Seiden et al (2006) discuss a number of cases where medical undergraduates prevented patient harm by speaking up. This emphasizes the importance of enabling students to do this from the start of training.

The authors of this article were interested in finding out why some medical undergraduates failed to challenge leadership decisions, while others were willing to do so. Although a number of writers have discussed the reasons for failure to challenge in a medical setting (*Table 1*) (Coats and Burd, 2002; Sutcliffe et al, 2004; Wachter, 2005; Kobayashi et al, 2006; Walton, 2006; Pian-Smith et al, 2009), there has as yet been no attempt to categorize and rank the most common reasons why medical undergraduate students fail to challenge more senior doctors.

Studies have also shown that there is a difference in perceived willingness to be challenged between seniors and juniors; seniors tend to believe that they encourage being challenged, a situation which is not corroborated by their juniors (Coats and Burd, 2002; Makary et al, 2006; Belyansky et al, 2011). Because failure to challenge

**Dr Michael J Moneypenny** is Director, Scottish Clinical Simulation Centre, Forth Valley Royal Hospital, Larbert, **Professor Arpan Guha** is Consultant in Critical Care, School of Medicine, University of Liverpool, Liverpool, **Surgeon Commander Simon J Mercer** is Consultant Anaesthetist, Aintree University Hospital NHS Foundation Trust, Liverpool, **Dr Helen O'Sullivan** is Senior Lecturer in Medical Education, Institute of Learning and Teaching, University of Liverpool, Liverpool L69 3BX and **Professor Judy McKimm** is Dean and Professor of Medical Education, College of Medicine, Swansea University, Swansea

Correspondence to: Dr H O'Sullivan (h.m.osullivan@liv.ac.uk)

erroneous decisions may contribute to patient morbidity and mortality (Belyansky et al, 2011), discovering the most common reasons for this failure should help to inform further research into overcoming actual or perceived barriers.

This article reports the results of a small scale study investigating the nature of challenge among medical students at a UK medical school.

**Table 1. Barriers to challenging**

Perceived barriers to action	Assumed hierarchy
	Fear of embarrassment of self or others
	Concern over being misjudged
	Fear of being wrong
	Fear of retribution
	Jeopardizing an ongoing relationship
	Natural avoidance of conflict
	Concern for reputation
Additional barriers when challenging a teacher or mentor	Respect for the teacher–student relationship
	Violation of a special trust
	High value placed on experience
	Concern over being negatively evaluated

adapted from Pian-Smith et al (2009)

**Table 2. Planned erroneous decisions**

Erroneous decision 1	Delaying needle decompression of a tension pneumothorax in order to await a chest X-ray which will take 15–20 minutes to be carried out. Vital signs are: blood pressure 70/50 mmHg, heart rate 130 bpm, oxygen saturation 75%
Erroneous decision 2	Decompressing the wrong hemithorax. The ‘senior’ plans to decompress the wrong hemithorax despite the absence of breath sounds, hyper-resonance to percussion and deviation of the trachea away from the other (correct) hemithorax

**Table 3. Scoring system for challenges**

Type	Score	Example
Say nothing	1	
Say something oblique, obtuse	2	‘Really?’
Advocate or inquire	3	‘Shouldn’t we do something about the pneumothorax?’
Advocate or inquire repeatedly, with initiation of discussion	4	‘Which way was the trachea deviated?’ and/or ‘Is that not a tension pneumothorax?’ and/or ‘Are you sure that is correct?’
Use crisp advocacy-inquiry	5	‘Well he’s still not stable enough to be honest to have an X-ray, so would you be able to release the tension pneumothorax?’

adapted from Pian-Smith et al (2009)

## The research study

A high-fidelity simulated scenario was designed in which a faculty member, playing the role of the senior member of the team, made two erroneous decisions regarding the correct care of a critically ill patient (Table 2). In deciding what the two erroneous decisions should be, the authors consulted medical students not involved in the study, the simulation centre staff and staff in the School for Medical Education. They wanted to incorporate two erroneous decisions which would be easily recognized as such by final year medical undergraduates. Making the errors ‘obviously’ wrong would allow the authors to avoid the problem encountered by Pian-Smith et al (2009) of being unsure whether the lack of a challenge was the result of a lack of knowledge rather than some other factor. The authors tested the scenario on a final year medical student not involved in the study and found that it worked as planned.

If the participants failed to challenge the erroneous decision, they would be prompted to do so by being asked questions such as: ‘That is right, isn’t it?’ If despite repeated (>3) prompts the candidate failed to challenge the senior then one of the other team members, also played by faculty staff, would challenge and the senior would change his/her mind.

A total of 18 final year medical students agreed to participate. The students were told that they would be involved in a simulated scenario which tested their team working and leadership skills. At the beginning of the session each medical student was welcomed, provided written consent, was briefed and given a routine introduction to the mannequin, its capabilities and limitations. This was followed by the scenario, which lasted up to 15 minutes. The scenario was video-recorded and the actions and oral communication of the participants noted.

Immediately following the scenario, the participants participated in a debrief which involved using a think-aloud technique (Fonteyn et al, 1993) and viewing of the video recording to explain their thoughts and beliefs during the scenario. The actions and verbal communication of the participants were analysed in relation to students’ reasoning during the debrief. The language used by the medical undergraduates in challenging the senior was coded according to a system used by Pian-Smith et al (2009) (Table 3).

## What the study showed

With every candidate having the opportunity to challenge twice, there were 36 instances where leadership could have been challenged. Twenty erroneous decisions were challenged without requiring a prompt, 10 decisions were challenged after one or more prompts and 6 decisions were never challenged.

The talk-aloud recordings from the latter two groups were analysed to elucidate whether the candidates knew that the senior was making a mistake and what their reasoning was for delaying or failing to challenge. In 15 of the

16 decisions (94%) the candidates knew the senior was mistaken. Three of the sixteen decisions could not be categorized as the candidates did not explain their reasoning. The remaining 13 decisions were categorized (Table 4).

In terms of the language used by the candidates, the authors found similarities with the post-debriefing cohort of Pian-Smith et al's study (Figure 1). The majority of candidates who did question the decision of the senior doctor used a combination of advocacy or inquiry language. Very few candidates used an obtuse method of questioning the erroneous decision.

**Discussion**

Although this study was small-scale, the findings are consistent with other studies and suggest that erroneous decisions remain unchallenged not because of a failure to notice that the decision is wrong, but because of reluctance to challenge the leader. The majority of failed challenges are the result of a perceived hierarchy, i.e. the senior is obeyed because he/she is senior rather than more experienced. This finding is backed up by other studies (Belyansky et al, 2011). It has also been suggested (Sydor et al, 2013) that the hierarchical nature of the medical profession might lead to reluctance to challenge leaders in critical matters of patient safety. This has been described by Cosby and Croskerry (2004) as the 'authority gradient' in medicine and the results of this study suggest that this gradient, whose negative effect is worst during high pressure situations, continues to exist. As Bromiley (2009) states: 'We are taught respect for our senior and/or experienced colleagues. It's often "simply not your place" to speak up. Again this deference to others is very common in incidents and accidents the world over.'

Effective team communication should be non-hierarchical (Mahlmeister, 2005), but this study shows that there is still an operating hierarchy within medicine which prevents medical undergraduates from speaking up, even in a simulated environment. What this demonstrates is how a follower's behaviour is influenced by his/her perception of how positional power and authority operates in the workplace. The perceived consequences of challenging a 'superior' from a professional perspective need further exploration to determine whether these beliefs are based on previous experiences, this specific relationship, rumour or low skill or esteem levels of the learner. It is the case, however, that a senior who is responsible (for example) for a student or trainees' assessment or sign off has a high level of power over him/her and the consequences of challenging may be perceived to not be worth the risk. From an intrapersonal perspective, by not challenging someone in power, the follower avoids being blamed, shamed or scared: all very powerful, core emotions which can highly influence behaviours, especially 'in the moment'.

Grint and Holt (2011) have proposed a typology of followership in which the students who did not challenge the decision in this study would be categorized as 'com-

pliant followers'. The aim of medical education at the undergraduate and postgraduate level should be to develop what Grint and Holt refer to as 'responsible' followers – team members who have the interpersonal skills to challenge authority and decision making in a way that will not contribute to a defensive or risk-averse culture.

**Conclusions**

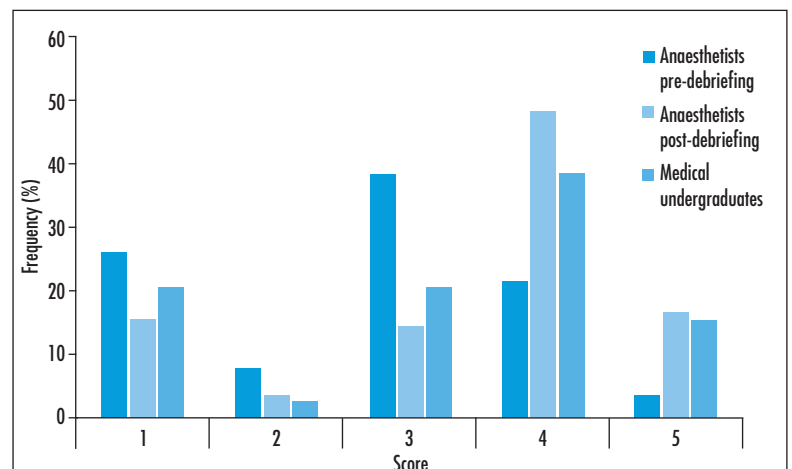
Of course this is a small scale study with a number of limitations but further research is needed in this area to determine which factors may influence the decision to challenge leadership and what educational interventions, such as use of the 'two challenge' rule (Agency for Healthcare Research and Quality, 2008; Pian-Smith et al, 2009) or simulation sessions incorporating erroneous decisions, may be effective in promoting appropriate leadership challenges. Similarly training needs to be included for more senior doctors to enable openness to challenge, which might be more helpfully termed 'discussion' or 'input' to the decision-making process. If the use of these interventions could be instituted at the undergraduate level as well as more generally throughout the medical workforce, we would be one step closer to providing a culture that promotes safer health care. **BJHM**

**Table 4. Reasons for failing to challenge**

Reason	Number (%)	Example
Assumed hierarchy	10 (77)	'...because the anaesthetist had arrived and I felt that we'd kind of transferred responsibility to him...'
High value placed on experience	6 (46)	'...he's obviously had experience of this in the past...'
Fear of being wrong	2 (15)	'... I had to understand it before we proceeded cos we needed to get this right.'
Fear of embarrassment of self	1 (8)	'Didn't want to say something that was gonna to be completely ridiculous.'

NB Numbers add up to more than 13 as some candidates provided more than one reason

**Figure 1. Comparison of scores from the study by Pian-Smith et al (2009) and the study of undergraduate medical students described in this article. The scoring system shown on the x-axis is outlined in Table 3.**



Ethical approval for this study was granted by the University of Liverpool Medical School's Research Ethics Committee.

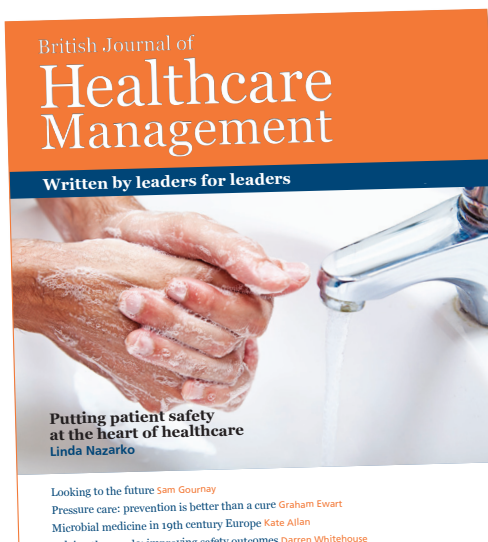
Conflict of interest: none.

- Agency For Healthcare Research And Quality (2008) TeamSTEPPS Fundamentals Course: Module 5. Mutual Support (continued). [www.ahrq.gov/teamstepstools/instructor/fundamentals/module5/igmutualsupp2.htm](http://www.ahrq.gov/teamstepstools/instructor/fundamentals/module5/igmutualsupp2.htm) (accessed 15 February 2013)
- Belyansky I, Martin TR, Prabhu AS et al (2011) Poor Resident-Attending Intraoperative Communication May Compromise Patient Safety. *J Surg Res* **171**(2): 386–94
- Berwick D (2013) *A promise to learn – a commitment to act: improving the safety of patients in England*. Department of Health, London
- Bromiley M (2009) Would you speak up if the consultant got it wrong? ...and would you listen if someone said you'd got it wrong? *J Perioper Pract* **19**(10): 326–9
- Coats RD, Burd RS (2002) Intraoperative communication of residents with faculty: perception versus reality. *J Surg Res* **104**(1): 40–5
- Cosby KS, Croskerry P (2004) Profiles in patient safety: authority gradients in medical error. *Acad Emerg Med* **11**(12): 1341–5
- Darzi A (2008) *High quality care for all: NHS next stage review final report*. Department of Health, London

- Firth-Cozens J (2004) Why communication fails in the operating room. *Qual Saf Health Care* **13**(5): 327
- Fonteyn EM, Kuipers B, Grobe SJ (1993) A Description of Think Aloud Method and Protocol Analysis. *Qual Health Res* **3**(4): 430–41
- Francis R (2013) *Report of the Mid Staffordshire NHS Foundation Trust public inquiry*. The Stationery Office, London
- General Medical Council (2007) *Medical students: professional values and fitness to practise*. General Medical Council, London
- Gladwell M (2008) *Outliers: The story of success*. Little, Brown and Co., New York
- Grint K, Holt C (2011) *Followership in the NHS*. The King's Fund, London
- Keogh B (2013) *Review into the quality of care and treatment provided by 14 hospital trusts in England: an overview report*. The Stationery Office, London
- Kobayashi H, Pian-Smith M, Sato M, Sawa R, Takeshita T, Raemer D (2006) A cross-cultural survey of residents' perceived barriers in questioning/challenging authority. *Qual Saf Health Care* **15**(4): 277–83
- Kohn LT, Corrigan J, Donaldson MS (2000) *To err is human: building a safer health system*. National Academy Press, Washington, D.C.
- Lingard L, Espin S, Whyte S et al (2004) Communication failures in the operating room: an observational classification of recurrent types and effects. *Qual Saf Health Care* **13**(5): 330–4
- Mahlmeister L (2005) Preventing Adverse Perinatal Outcomes Through Effective Communication. *J Perinat Neonatal Nurs* **19**(4): 295–7
- Makary MA, Sexton JB, Freischlag JA et al (2006) Operating room teamwork among physicians and nurses: teamwork in the eye of the beholder. *J Am Coll Surg* **202**(5): 746–52
- Milgram S (1963) Behavioral study of obedience. *J Abnorm Psychol* **67**: 371–8
- Pian-Smith M, Simon R, Minehart RD et al (2009) Teaching residents the two-challenge rule: A simulation-based approach to improve education and patient safety. *Simul Healthc* **4**(2): 84–91
- Seiden S, Galvan C, Lamm R (2006) Role of medical students in preventing patient harm and enhancing patient safety. *Qual Saf Health Care* **15**(4): 272–6
- Sutcliffe KM, Lewton E, Rosenthal MM (2004) Communication failures: an insidious contributor to medical mishaps. *Acad Med* **79**(2): 186–94
- Sydor D, Bould M, Naik V et al (2013) Challenging authority during a life-threatening crisis: the effect of operating theatre hierarchy. *Br J Anaesth* **110**(3): 463–71
- Wachter R (2005) Low on the Totem Pole. [webmm.ahrq.gov/case.aspx?caseID=110](http://webmm.ahrq.gov/case.aspx?caseID=110) (accessed 15 February 2012)
- Walton M (2006) Hierarchies: the Berlin Wall of patient safety. *Qual Saf Health Care* **15**(4): 229–30

### KEY POINTS

- A large body of work has identified the difficulties and barriers of challenging the decisions or behaviours of those in authority.
- A small scale, simulation-based study involving medical students produced similar findings to those involving senior doctors and in other settings relating to reluctance to challenge seniors.
- The concept of 'followership' provides an explanatory framework through which the relationship between students, doctors in training and senior doctors can be explained.
- There are serious implications for patient safety if teams and cultures are based on hierarchies, over-reliance on positional power, and command and control leadership styles.
- More work needs to be done to determine the most effective ways of developing confidence and skills so that students and doctors in training can have clear, consistent and listened-to input into decision making.



## Promoting excellence in healthcare management

Founded in 1995, **British Journal of Healthcare Management** is the leading monthly magazine focusing on management and leadership trends as they affect the healthcare sector.

Published 12 times, *BJHCM* publishes peer-reviewed clinical and research articles, news analysis, topical content and commentary. Regular features include **budgeting and commissioning, health technology, clinical reviews, and the 'Medicine for Managers' series**, which provides managers with key information on the latest treatments and their cost-effectiveness.

**Lead the discussion and debate.**

To subscribe visit [www.magsubscriptions.com/bjhcmm](http://www.magsubscriptions.com/bjhcmm)