

Clinical supervisors: are they the key to making care safer?

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Received 30 October 2012
Revised 28 April 2013
Accepted 5 May 2013
Published Online First
25 May 2013

ABSTRACT

The evidence shows that notwithstanding efforts by health professionals and hospital managers to improve the quality and safety of healthcare, adverse events remain prevalent. Clinical supervision is understandably dominated by transferring discipline knowledge and skills but the environment today requires equal attention to integrating patient safety concepts and principles into clinical supervision. Trainees learn from supervisors who themselves often have inadequate patient safety knowledge and skills. This conundrum may partly explain why there has been no visible reduction in adverse events. Patient safety literature has emphasised that clinical errors are rarely linked with incompetent doctors or trainees with inadequate knowledge but rather to failures in appreciating the context, complexity and uncertainty of clinical decisions made under the pressure of time. It is time to consider whether clinical supervisors themselves first need to demonstrate patient safety competencies before being responsible for supervising trainees.

INTRODUCTION

Improving the quality and safety of healthcare necessarily involves health professions yet many patient safety initiatives do not take the prerequisite step of training doctors in patient safety.¹ This failure to engage clinicians is a reason why many improvement activities are not sustained.² The article by Ahmed *et al*³ describing a patient safety education programme for senior doctors is therefore timely. Using a train the trainer model, their curriculum focused on mistakes and incident management and importantly provided a post-course avenue for continued engagement. Of 216 senior doctors interested in patient safety, 122 senior doctors from 20 hospitals in the North Western Deanery in London were recruited. Seventy per cent of the doctors attending the half-day workshop said their post-workshop knowledge of patient safety had

significantly improved and was sustained. While 89% of the participants agreed to continue engagement in patient safety, only 68% agreed to support the training of subsequent cohorts. The authors noted time limitations might be a factor but more research was required.

Several patient safety education frameworks have been available since 2005^{4 5 6} and provide foundations for patient safety education programmes, such as the Patient Safety Education Program-Canada,⁷ the Institute for Health Improvement, Open School (US)⁸ and the WHO Patient Safety Curriculum for Multi Professionals.⁹ These are stand-alone programmes involving off-site training of teams of healthcare professionals or for organisations and individuals. The recipients of patient safety education and training to date have mainly been medical students and trainees. A 2010 systematic review of patient safety teaching to trainees identified learner, faculty and organisational factors impeding patient safety education and training.¹⁰ Lack of faculty capacity has long been identified as a factor in patient safety education^{11 12} but missing from this literature is consideration of the role of clinical supervision. Sporadic attention by hospitals and the specialist colleges to preparing doctors for safe practice is given, but most only give superficial attention to patient safety education and training. Accrediting bodies such as the Australian Medical Council¹³ and the UK General Medical Council¹⁴ describe patient safety competencies and, depending on the activity, require applicant institutions to demonstrate how and where patient safety learning occurs. Other countries such as Canada and the USA¹⁵ leave medical colleges and the universities to determine the content of their curricula.

Patient safety though is not just another course; it requires a new conceptual



► <http://dx.doi.org/10.1136/bmjqs-2012-001626>
► <http://dx.doi.org/10.1136/bmjqs-2013-001926>

To cite: Walton M, Barraclough B. *BMJ Qual Saf* 2013;**22**:609–612.

approach to clinical practice. It requires a mindset that considers the role of the system of healthcare and the potential for failures that cause patient harm. These competencies, although described, are yet to be integrated into clinical practice.^{16 17} One reason progress has been slow might be the emphasis on the acquisition of technological knowledge and skills producing a mindset for clinicians that undervalues patient safety knowledge—understanding healthcare as a system, minimising mistakes, the consequences of miscommunication, the benefits of teamwork and the relevance of engaging patients. Most trainees learn on the job under supervision but the extent to which supervision includes patient safety concepts and principles in training has been little researched.¹

EXPANDING THE MINDSET

Post graduation, the clinical years are designed to motivate trainees to apply their knowledge and practice clinical skills. Supervisors can expand the mindset of trainees through explicit teaching of patient safety concepts and principles as they teach discipline knowledge and skills.

Clinicians apply knowledge, clinical reasoning and decision making in the context of individual patients and within complex systems. These trainee years are essential for developing critical thinking.¹⁸ These broader sets of skills involve cognitive processes vulnerable to external factors, such as fatigue, hunger, work overload, conflict with colleagues and inadequate supervision. All supervisors experience these environmental factors but rarely are they valued as learning and thus rarely make them explicit or raise them for discussion with trainees.

The mindset of clinicians is developed and honed by their discipline and their experience of their patients. They master specialised scientific knowledge of particular body systems and conditions. The scientific inquiry and discovery advocated by Flexner¹⁹ over a century ago remains fundamental to modern medicine. But applying scientific knowledge in the clinical environment today is even more complex: new technologies and drugs, multiple diagnostic and therapeutic regimes; older patients with complex comorbidities and specialisation have rendered reliance on science alone dangerous. The context—how and where patients are treated—has an impact on outcomes. Flexner wrote that clinical decision making must include social and humanistic factors.²⁰ To this we add organisational and systemic factors and other patient safety concepts and principles.

Many adverse events are caused by factors unrelated to science: inadequate teamwork, poor relationships with patients, poor understanding of human factors and inadequate knowledge about the impact of complexity on healthcare.²¹ Unless the mindset includes the healthcare environment and its context we are unlikely to see a decrease in adverse event rates.

Clinicians are rarely influenced by patient safety policies and guidelines produced by governments; supervisors and senior leaders shape their mindset notwithstanding the significance of the role played by legislators, administrators and managers. One difficulty is that trainees learn from supervisors who lack a patient safety mindset—they do not demonstrate patient safety knowledge and skills. This conundrum may partly explain why there has been no measurable reduction in adverse events. Patient safety literature emphasises that clinical errors are rarely caused by incompetent doctors or trainees with inadequate knowledge but rather are occasioned by failure to appreciate the context, complexity and uncertainty of clinical decisions made under the pressure of time.

THE CLINICAL ENVIRONMENT

Since Flexner, new patient management techniques, new surgical techniques, technology and changing community expectation are occurring along with increased service demands and shrinking hours for teaching and learning.

Safe healthcare is assured when clinicians are patient centred, work in interdisciplinary healthcare teams, practice evidence-based medicine and understand the context and environment in which they and their team deliver care.⁴ That environment requires deep understanding of organisational complexity, systems, human factors, error recognition, prevention and management, and uses improvement methods to measure and improve patient outcomes.^{22 23}

RESHAPING THE ROLE FOR CLINICAL SUPERVISORS

Effective clinical supervision facilitates a trainee acquiring scientific and clinical knowledge. Successful learning usually occurs when supervisors pay attention to their trainee's development and performance. The traditional apprenticeship model in medicine involved two or three trainees and one teacher who remained together for 7 years.²⁴ This model has not been viable since the second half of the twentieth century when a trainee began to have several supervisors. Situated learning, which grew out of the apprenticeship model, requires trainees to fully participate and interact socially with the healthcare team, including patients, and occurs when they are exposed to their teachers' habits, values and behaviours.^{25 26} This is a vital role for the clinical supervisor: through explicit statement and reinforcing of patient safety concepts and principles they can assist a trainee to become a safe practitioner. Even when a clinical supervisor does not make explicit the attributes of their practice, trainees will learn these same attributes through unspoken behaviours and values. These behaviours are often referred to as 'tacit knowledge'—knowledge belonging to the realm of 'doing' rather than 'knowing why' or 'knowing how'. Trainees observe how supervisors interact with other health professionals and patients,

the extent to which they know how to avoid errors, how they manage them when they occur, how they interact with technology and the environment and how they mitigate error.

REVIEWING CLINICAL SUPERVISION

Clinical supervision can legitimise, reinforce or disapprove of trainee behaviours in their approach to safety. Many trainees pay close attention to their seniors and try to be as much like them as possible, believing this to be the pathway to advancement. Educational theory tells us learners are likely to copy and recall facts and concepts at the time they are instructed and in the context of use.²⁷

One difficulty is that medical and government reports about clinical supervision view patient safety simply as an outcome rather than as a set of competencies to be mastered. The evaluation of the 2010 UK Foundation Programme²⁸ noted that close and effective clinical and educational supervision of trainees is crucial for the development of trainees' competence and confidence, and is likely to be a key determinant of patient safety. Building on this premise the Professional Development Framework²⁹ published by the London Deanery in 2012 specifically identifies attributes for effective supervision. The how of supervision is directly addressed but any requirement for supervisors to themselves demonstrate patient safety competencies is missing. The Shape of Training Review currently underway in the UK offers an opportunity to examine clinical supervision in the context of contemporary community concerns about patient care.³⁰ In Canada the Guidelines for Clinical Supervision are silent on the relevance to safe patient care of non-technical competencies.³¹ Health Workforce Australia's 2011 report, Clinical Supervision Support Program-Directions Paper,³² aims to expand capacity and competence across the educational and training continuum for all health professionals. Critical to the programme is the preparation and training of supervisors to deliver a competent clinical supervision workforce. While core supervisor skills are emphasised in the report, no mention is made of the need for specific skills in the non-science domains. Core competencies described by Kilminster *et al*³³ are outlined in the report and include 'Demonstrating clinical competence'. There is no definition of clinical competence and no explicit reference to the skills and knowledge relevant to safe patient care.

IMPROVING THE QUALITY AND SAFETY OF PATIENT CARE

Many supervisors think of quality supervision as transmitting discipline/technical knowledge and skills, and while trainee reports routinely include assessment in communication, teamwork and ethics, the actual teaching of these competencies remains undeveloped by supervisors and unobserved by many trainees.

How many trainees have observed a supervisor make a mistake, manage it and then talk about how to learn from it?

While trainees can be assessed for each patient safety competency, patient safety learning is best approached as formative assessment by providing feedback to the trainee as they gain deeper experience, knowledge and skills on progressing through their training. Clinical supervisors who use feedback, active role modelling and mentoring can influence the mindset of clinicians towards patient safety. First supervisors themselves need to demonstrate the competencies associated with safe and effective patient care. The specialist colleges (as a collaborative) in association with hospital chief executives could design an accreditation programme for supervisors in patient safety, along similar lines to that designed by Ahmed and colleagues. Only when clinicians have been accredited as patient safety competent would they be permitted to supervise trainees.

CONCLUSION

The focus of patient safety education has been on building patient safety education frameworks and curricula. Targeted education and training programmes for different types of health professions are emerging but without the engagement of clinical supervisors it will be difficult to see any major change. The next step is to build capacity of clinician supervisors. Some clinical supervisors have integrated patient safety concepts and principles into their clinical practice but time pressure prevents them from giving feedback about that aspect of their practice; the teaching is not yet explicit. Other clinicians are not yet aware or convinced. It is timely to move to this next phase and require clinical supervisors to integrate patient safety concepts and principles into clinical practice, teaching and supervision. Expanding the mindset of trainees does not require new educational paradigms or any diminution of scientific knowledge; it only requires clinical supervisors to demonstrate patient safety knowledge and skills and apply it with the same dedication they pass on discipline knowledge and skills.

Contributors MW wrote the first draft of the article and the commentary. She made all the subsequent changes recommended by the editor and the reviewers. BB made contributions to the first article that was submitted to the journal. He also made comments and suggestions to the commentary which emerged from the article first presented.

Competing interests None.

Provenance and peer review Not commissioned; externally peer reviewed.

REFERENCES

- Walton M, Elliot E. Improving safety and quality: how can education help? *Med J Aust* 2006;184:S60-4.
- Baker RG. The challenges of making care safer: leadership and system transformation. *Healthc Q* 2012;15.

- 3 Ahmed M. Building capacity and capability for patient safety education: A train the trainers programme for senior doctors. *Qual Saf Health Care* 2013 In this issue.
- 4 Walton M, Shaw T, Barnett S, *et al.* Developing a national patient safety education framework for Australia. *Qual Saf Health Care* 2006;15.
- 5 Graham I, Gleason A, Keogh G, *et al.* Australian curriculum framework for junior doctors. *Med J Aust* 2007;186:S14–19.
- 6 Canadian Patient Safety Institute. *The safety competencies*. 1st edn. Toronto: Canadian Patient Safety Institute, 2009.
- 7 Canadian Patient Safety Institute. *Patient safety education program—Canada*. Edmonton, 2013. <http://www.patientsafetyinstitute.ca/english/education/patientsafetyeducationproject/pages/default.aspx> (accessed 14 May 2013).
- 8 Institute for Healthcare Improvement. *Institute for Healthcare Improvement Open School*. Cambridge, MA: Institute for Healthcare Improvement, 2013. <http://www.ihl.org/offerings/IHIOpenSchool/Pages/default.aspx> (accessed 14 May 2013).
- 9 World Health Organization. *The WHO patient safety curriculum guide multi-professional edition*. Geneva: World Health Organization, 2012. <http://www.who.int/patientsafety/education/curriculum/en/index.html> (accessed 14 May 2013).
- 10 Wong BM, Etchell EE, Kuprer A, *et al.* Teaching quality improvement and patient safety to trainees: a systematic review. *Acad Med* 2010;85:1425–39.
- 11 Wong BM, Levinson W, Shojania KG. Quality improvement in medical education: current state and future directions. *Med Educ* 2012;46:107–19.
- 12 Walton M, Woodward H, Van Staaldunin S, *et al.* (WHO) Patient safety curriculum guide for medical schools. *Qual Saf Health Care* 2010;19:542–46.
- 13 Australian Medical Council. Assessment and accreditation of medical schools: standards and procedures. Kingston ACT Australian Government, 2009. <http://www.limenetwork.net.au/files/lime/standards.pdf> (accessed 14 May 2013).
- 14 General Medical Council. *Tomorrow's doctors*. London: General Medical Council, 2009. http://www.gmc-uk.org/education/undergraduate/GMC_tomorrows_doctors.pdf
- 15 Liaison Committee on Medical Education. Functions and structure of a medical school: standards for accreditation of medical education programs leading to the M.D. degree. Association of American Medical Colleges, American Medical Association, Committee on Accreditation of Canadian Medical Schools, 2008.
- 16 Cox M, Irby D, Sullivan W, *et al.* American medical education 100 years after the Flexner report. *N Engl J Med* 2006;355:1339–44.
- 17 Bardes CL. Defining 'patient-centered medicine'. *N Engl J Med* 2012;366:782–3.
- 18 Scriven M, Paul R. Critical thinking defined. <http://www.criticalthinking.org/pages/defining-critical-thinking/766> (accessed Apr 2012).
- 19 Flexner A. *Medical education in the United States and Canada*. New York: Carnegie Foundation for the Advancement of Teaching, 1910.
- 20 Flexner A. *Medical education: a comparative study*. New York: MacMillan, 1925.
- 21 Institute of Medicine. *To err is human: building a safer system*. Washington, DC: National Academy Press, 2000.
- 22 Vincent C. *Patient safety*. 2nd edn. Oxford: Wiley-Blackwell, BMJ Books, 2010.
- 23 Runciman W, Merry A, Walton M. *Safety and ethics in healthcare*. Aldershot, UK: Ashgate, 2007.
- 24 Sinclair S. *Making doctors: an institutional apprenticeship*. Oxford, UK: Berg, 1997.
- 25 Kaufman DM, Mann KV. Teaching and learning in medical education: how theory can inform practice. In: Swanwick T. *Understanding medical education evidence theory and practice*. London: Wiley-Blackwell, 2010.
- 26 Lave J, Wenger E. *Situated learning: legitimate peripheral participation*. Cambridge: Cambridge University Press, 1991.
- 27 Bransford J, Brown A, Cocking R. *How people learn: brain, mind, experience, and school*. Washington, DC: National Academy Press, 1999.
- 28 Collins J. Foundation for excellence: an evaluation of the foundation programme. London: Medical Education England, 2010. http://www.mee.nhs.uk/pdf/401339_MEE_FoundationExcellence_acc.pdf (accessed 14 May 2013).
- 29 London Deanery. *Professional development framework for supervisors in the London Deanery*. London: National Health Service, 2012.
- 30 General Medical Council, UK. Shape of training. 2013. <http://www.shapeoftraining.co.uk/> (accessed 14 May 2013).
- 31 The College of Physicians and Surgeons of Ontario. Guidelines for college-directed supervision. Part B—Clinical supervision. Ontario. <http://www.cpso.on.ca/policies/guidelines/default.aspx?id=3312&terms=supervision> (accessed 14 May 2013).
- 32 Health Workforce Australia. Clinical supervision support program-directions paper. Adelaide: Health Workforce Australia, 2011.
- 33 Kilminster S, Cottrell D, Grant J, *et al.* AMEE Guide No. 27: effective educational and clinical supervision. *Med Teach* 2007;29:2–19.