

Speaking up in resource-constrained settings: how to secure safe surgical care in the moment and in the future?

Graham P Martin ,¹ Natalie Armstrong ²

¹University of Cambridge, Cambridge, UK

²Department of Health Sciences, University of Leicester, Leicester, UK

Correspondence to

Professor Graham P Martin, University of Cambridge, Cambridge CB2 0AH, UK; graham.martin@thisinstitute.cam.ac.uk

Accepted 2 March 2022

The provision of safe surgical care in low- and middle-income countries is challenging. Mortality and morbidity in the perioperative period are high and likely to rise as the burden of non-communicable diseases increases in these countries.¹ Both access to, and quality of, surgical and perioperative care remain challenging in much of the world. In many African countries, for example, risk of mortality following surgery is around twice the global average, despite more favourable patient risk profiles in terms of age and acuity of condition.² Resource deficiencies appear to be heavily implicated in these poorer outcomes, especially during postoperative care and for patients who would benefit from care and surveillance in intensive care facilities, which are scarce in low-income settings.³ However, as Mawuena and Mannion⁴ show in an article in this issue, resource limitations can have important impacts beyond their direct effect on what is available before, during and after surgery: they can also contribute to an environment in which identifying, learning from and acting on concerns about quality of care become especially difficult.

Reporting on a study undertaken in two Ghanaian hospitals, the authors identify ways in which resource constraints—including both material deficiencies and staff shortages that lead to excessive workloads—militate against the voicing of concerns. A key finding is that participants are typically reluctant to devote personal resources to speaking up that might at best seem futile and at worst risk inviting opprobrium and further burdens for the speaker. Such reluctance is, of course, not unique to low-income settings. Silence about concerns is a problem well documented across the world, in healthcare and in other

environments,^{5 6} and many of the reasons are very similar to those found by Mawuena and Mannion: uncertainty about the benefits likely to arise from raising concerns; fear about the responses of superordinates; and the risk of adverse consequences for relationships with peers.^{5 7 8} Failures on the part of organisations and managers to listen effectively are also familiar from other settings and act to further suppress voice.⁹ The scale and scope of the constraints facing participants, however, and the risks they pose to the safety of patients and staff alike are likely well outside the experience of practitioners in most high-income surgical settings. Similarly, Mawuena and Mannion's findings, like those of others,¹⁰ suggest that steep authority gradients and strongly hierarchical relationships between professional groups may pose a particular challenge in resource-constrained contexts.

The paper highlights an important tension faced by practitioners in the hospitals studied: between addressing the immediate needs of the patient in front of them using whatever resources may be available (safety 'in the moment') and ensuring quality and safety of care for the future patient population (safety 'in the future'). Mawuena and Mannion document the improvisations made by doctors and nurses to secure the safety of patients in the moment which, in the absence of appropriate resources, meant compromises, shortcuts and quick fixes. The participants understood all too well that the solutions they had found were far from satisfactory but felt they had little other choice.

While improvisation of this kind may sometimes be a necessity, the problem is that it can very quickly become routine: a matter of normalised deviance and



► <http://dx.doi.org/10.1136/bmjqs-2021-014287>



© Author(s) (or their employer(s)) 2022. No commercial re-use. See rights and permissions. Published by BMJ.

To cite: Martin GP, Armstrong N. *BMJ Qual Saf* Epub ahead of print: [please include Day Month Year]. doi:10.1136/bmjqs-2021-014624

accepted standard.^{11 12} Acquiescing to substandard care also creates dilemmas for individual practitioners, who may find themselves caught in ‘bonds of transgression [...] shared by providers as a way of getting things done’.¹³ This may provoke responses that further subdue voice. What is so bad about this particular deviation, when you seemed happy to tolerate (or perhaps even initiated) something similar last week? Why cause trouble for your colleagues who, like you, are probably just competent, well meaning individuals trying to do the best job they can for their patients in difficult circumstances?

An important question, therefore, is what can be done to reconcile these conflicting priorities: to create environments and cultures that permit practitioners to do the best they can for patients in need of care right now, while still upholding the highest standards and aspirations for quality that staff and patients both deserve. Research informed by the Safety II perspective shows that good healthcare practice is not always a matter of adhering to the standards set out in ‘work as imagined’—and indeed that sometimes, the improvisations of ‘work as done’ are key to the delivery of safe care.¹⁴ This research, however, has predominantly taken place in high-income settings,¹⁵ where the day-to-day workarounds are perhaps lower-stakes than, for example, squeezing blood from gauzes before reusing them.⁴

How, then, might healthcare providers organise to achieve the right balance between getting the job done and securing the longer term safety of patients and staff? Undoubtedly, acknowledgement of the necessary evil of occasional compromises will form a part of this, as will mature dialogue oriented towards shared principles across the range of groups affected. There is a need to reach common ground about what can reasonably be tolerated in what circumstances and what constitutes cause for any practitioner involved to ‘stop the line’,¹⁶ in relation to safety, quality and interpersonal behaviour. Concepts such as ‘just culture’ might offer a model for ensuring that expectations, responsibilities and accountability for acts are distributed and enacted fairly, in a way that acknowledges the constraints and demands faced by practitioners.¹⁷ Of course, putting such ideas into practice is no small task and requires not just agreement on the principles but also work to change culture and establish and embed institutions for realising them.

Even then, however, there is a risk of ‘safety imperialism’: exporting solutions developed and tested in high-income contexts on the assumption that these offer the best model for every setting. As Kimball and Wagenaar highlight, low and middle-income countries may have features that necessitate the adaptation of interventions that have worked in high-income settings,¹⁸ and others have similarly urged caution with regard to unreflexive transfer of the products of the healthcare industry of the high-income world.^{19 20}

Comparative analyses highlight the contingency of good professional practice on material resources and on wider cultural norms, legal systems and social institutions.²¹

More than this, though, it is important to resist the homogenising tendency of terms like ‘low- and middle-income country’, and recognise the diversity of resource levels, organisational forms and sociocultural contexts both between and within countries covered by this broad umbrella. There is no more reason to believe that the challenges facing healthcare practitioners in Ghana mirror those in Laos than that the problems of the United Kingdom’s health system are reducible to those of the United States. Similarly, it should come as no surprise that some healthcare organisations in a low- or middle-income country perform better than others, as shown by recent work seeking to improve surgical quality in Tanzania.²²

Thus, while certain universal principles regarding justice, responsibility and accountability may apply globally, operationalising and institutionalising them in a sustainable way demands local ownership, and sensitivity to the consequences of national, regional and even local context. The benefits of nurturing, listening to and learning from more diverse sources of insight about how to do improvement are potentially great. Ultimately, innovative approaches to valuing voice developed outside the high-income centres that have traditionally dominated thinking could have important value worldwide.²³

Twitter Graham P Martin @graham_p_martin and Natalie Armstrong @drnatarstrong

Acknowledgements Graham Martin is supported by the Health Foundation’s grant to the University of Cambridge for The Healthcare Improvement Studies (THIS) Institute. THIS Institute is supported by the Health Foundation – an independent charity committed to bringing about better health and health care for people in the UK

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient consent for publication Not applicable.

Ethics approval Not applicable.

Provenance and peer review Commissioned; internally peer reviewed.

ORCID iDs

Graham P Martin <http://orcid.org/0000-0003-1979-7577>

Natalie Armstrong <http://orcid.org/0000-0003-4046-0119>

REFERENCES

- 1 Bickler SW, Weiser TG, Kassebaum N, *et al.* Global burden of surgical conditions. In: Debas HT, Donkor B, Gawande A, *et al.*, eds. *Essential surgery*. 3rd ed. Washington, DC: World Bank, 2015.
- 2 Biccard BM, Madiba TE, Kluyts H-L, *et al.* Perioperative patient outcomes in the African surgical outcomes study: a 7-day prospective observational cohort study. *Lancet* 2018;391:1589–98.

- 3 ASOS-2 Investigators. Enhanced postoperative surveillance versus standard of care to reduce mortality among adult surgical patients in Africa (ASOS-2): a cluster-randomised controlled trial. *Lancet Glob Health* 2021;9:e1391–401.
- 4 Mawuena EK, Mannion R. Implications of resource constraints and high workload on speaking up about threats to patient safety: a qualitative study of surgical teams in Ghana. *BMJ Qual Saf* 2022. doi:10.1136/bmjqs-2021-014287. [Epub ahead of print: 20 Jan 2022].
- 5 Martin GP, Aveling E-L, Campbell A, *et al*. Making soft intelligence hard: a multi-site qualitative study of challenges relating to voice about safety concerns. *BMJ Qual Saf* 2018;27:710–7.
- 6 Morrison EW, Milliken FJ. Organizational silence: a barrier to change and development in a Pluralistic world. *Acad Manage Rev* 2000;25:706–25.
- 7 Wu F, Dixon-Woods M, Aveling E-L, *et al*. The role of the informal and formal organisation in voice about concerns in healthcare: a qualitative interview study. *Soc Sci Med* 2021;280:114050.
- 8 Milliken FJ, Morrison EW. Shades of silence: emerging themes and future directions for research on silence in organizations. *Journal of Management Studies* 2003;40:1563–8.
- 9 Jones A, Kelly D. Deafening silence? time to reconsider whether organisations are silent or deaf when things go wrong. *BMJ Qual Saf* 2014;23:709–13.
- 10 Aveling E-L, McCulloch P, Dixon-Woods M. A qualitative study comparing experiences of the surgical safety checklist in hospitals in high-income and low-income countries. *BMJ Open* 2013;3:e003039.
- 11 Vaughan D. *The Challenger launch decision: risky technology, culture, and deviance at NASA*. London: University of Chicago Press, 1997.
- 12 McCutcheon K, Osborne S. The standard you walk past is the standard you accept. *J Perioper Pract* 2015;25:26–7.
- 13 Henriksen K, Dayton E. Organizational silence and hidden threats to patient safety. *Health Serv Res* 2006;41:1539–54.
- 14 Debono DS, Greenfield D, Travaglia JF, *et al*. Nurses' workarounds in acute healthcare settings: a scoping review. *BMC Health Serv Res* 2013;13:175.
- 15 Ellis LA, Churrua K, Clay-Williams R, *et al*. Patterns of resilience: a scoping review and bibliometric analysis of resilient health care. *Saf Sci* 2019;118:241–57.
- 16 Furman C, Caplan R. Applying the Toyota production system: using a patient safety alert system to reduce error. *Jt Comm J Qual Patient Saf* 2007;33:376–86.
- 17 Wachter RM. Personal accountability in healthcare: searching for the right balance. *BMJ Qual Saf* 2013;22:176–80.
- 18 Kimball M, Wagenaar B. Applying a systems lens to understand patient safety effectiveness in low-and-middle-income countries. *BMJ Qual Saf*. in press.
- 19 Okwaro FM, Chandler CIR, Hutchinson E, *et al*. Challenging logics of complex intervention trials: community perspectives of a health care improvement intervention in rural Uganda. *Soc Sci Med* 2015;131:10–17.
- 20 Vukoja M, Riviello ED, Schultz MJ. Critical care outcomes in resource-limited settings. *Curr Opin Crit Care* 2018;24:421–7.
- 21 Aveling E-L, Parker M, Dixon-Woods M. What is the role of individual accountability in patient safety? A multi-site ethnographic study. *Sociol Health Illn* 2016;38:216–32.
- 22 Alidina S, Chatterjee P, Zaniel N, *et al*. Improving surgical quality in low-income and middle-income countries: why do some health facilities perform better than others? *BMJ Qual Saf* 2021;30:937–49.
- 23 Crisp N. *Turning the world upside down: the search for global health in the 21st century*. London: RSM Books, 2010.