Journal of Healthcare Simulation

Check for updates

Journal of Healthcare Simulation

LETTER

Even better if...

Sarah Galbraith[1], Victoria Sobolewska[1], Joe Roberts[1], Ewan McCorry[1]

[1]*Medical Education Directorate, NHS Lothian, Edinburgh, UK*

Corresponding author: Sarah Galbraith, sarah.galbraith@nhs.scot

https://johs.org.uk/article/doi/10.54531/SSPW3124

We read the abstract by Leonard et al. [1] highlighting the use of high-fidelity simulation to increase medical students' confidence in the management of paediatric emergencies with a degree of relatability. We too recognize the impact limited training opportunities have on learners' preparedness for clinical practice and have responded to an illustration of this by developing a simulation for the management of iatrogenic bleeding during bronchoscopy, a rare but potentially fatal event.

The authors' intervention was scheduled for medical students' penultimate week of paediatric placement, demonstrating consideration of participants' psychological safety and ensuring they acquire knowledge before progressing to performance. The *challenge point* framework suggests that, as educators, we must strike the balance between challenge and performance to optimize participants' learning, and a baseline level of knowledge will influence the degree of challenge faced by participants [2].

Bleeding during bronchoscopy is considered a high acuity, low occurrence (HALO) event, for which simulation training has been shown to be an effective educational tool [3]. In contrast to the above study, we considered it crucial to involve all members of the bronchoscopy team, including the bronchoscopy nurses, as effective management of this emergency does not rely solely on the actions of an individual but those of the team. Interprofessional simulation, where two or more learners from different professions collaborate in a safe learning space, enhances overall communication and teamwork, ultimately leading to safe and effective patient care [4]. Early introduction of interprofessional education to undergraduate curricula gives participants a greater appreciation of professional roles and improves multidisciplinary team working in the real clinical environment [5]. We would encourage Leonard et al. to consider this approach when developing their intervention and explore the possibility of offering this simulation opportunity to other healthcare students to improve overall collaboration. Without the involvement of the whole team, can it really be deemed high-fidelity?

Furthermore, we are interested in the authors' positivist paradigm. Conducting research in the clinical setting requires pragmatism, and we appreciate the limitation of resources. However, when evaluating preparedness, we prefer to take a constructivist stance. We are of the view that preparedness is achieved through a social, active and contextual learning process that is unique to each individual and is not a quantifiable measurement. To truly understand the learning taking place in any educational intervention, we must be thoughtful about the outcomes being measured and how these will be evaluated. Self-reported confidence, gathered quantitatively, provides little insight into *how* the learning was achieved. For this simulation, utilizing the debrief as a focus group for data collection would enrich the quantitative data and provide a

Submission Date: 15 December 2024
Accepted Date: 05 February 2025
Published Date: 14 April 2025

greater understanding of the intervention's effectiveness in improving the participants' preparedness. This will assist with the ongoing development of the educational intervention, ensuring optimal use of resources and enhancing the sustainability of the programme. Introducing an interprofessional element to the simulation would provide data from different perspectives and raise the credibility of the study.

Limited training opportunities are an ever-present issue in clinical education, and we commend Leonard et al. for raising this educational challenge and their willingness to address it.

Declarations

Authors' contributions

None declared.

Funding

None declared.

Availability of data and materials

None declared.

Ethics approval and consent to participate

None declared.

Competing interests

None declared.

References

1. Leonard G, Damania T, Goyos A, Das D, Adodra A, Johnston E. High fidelity simulation to improve medical students' confidence in managing paediatric emergencies. International Journal of Healthcare Simulation. 2024 Nov;4(1):35–35. doi: 10.54531/RBFJ3198
2. Guadagnoli MA, Lee TD. Challenge point: a framework for conceptualizing the effects of various practice conditions in motor learning. Journal of Motor Behaviour. 2004 Jul 1;36(2):212–224. doi: 10.3200/JMBR.36.2.212-224
3. Bierer J, Horne D, Warren A, Sett S, Dhillon S, Coolen J. Interprofessional patient-specific simulation preparation to improve management of neonatal high-acuity low-occurrence (HALO) scenarios. Canadian Journal of Cardiology. 2021 Aug 1;37(8):1271–1274. doi: 10.1016/j.cjca.2021.02.021
4. Olenick M, Allen LR, Smego Jr RA. Interprofessional education: a concept analysis. Advances in Medical Education and Practice. 2010 Nov 25;1:75–84. doi: 10.2147/AMEP.S13207
5. Nichols A, Wiley S, Morrell BL, Jochum JE, Moore ES, Carmack JN, Hetzler KE, Toon J, Hess JL, Meer M, Moore SM. Interprofessional healthcare students' perceptions of a simulation-based learning experience. Journal of Allied Health. 2019 Sep 6;48(3):159–166.