LOW-FIDELITY SIMULATION IN GLOBAL AND DISTRIBUTED SETTINGS

To the editor:

I enjoyed the *CJEM* June 2015 article about the International Federation of Emergency Medicine (IFEM) and continuing professional development.[1] Hobgood et al. note that there is "at least modest evidence for the use of high-fidelity medical simulation, particularly for use in teamwork training and critical incident communication, two essential EM competencies."[1] They also note that "there are core principles that IFEM endorses: every EP should evolve in the multiple domains that are required for practice advancement; patient care should evolve according to the best available evidence; and there is a set of basic core EM knowledge, skills, and attitudes that define the discipline regardless of the location of practice."[1]

Low-fidelity simulation, used with sound pedagogy, also has a positive effect on learning[2-6] and may be a more effective tool than high-fidelity simulation in global low-resource settings. Simulation feasibility, or required cost and value attained, relates to affordability and logistic implementation.[5] High-fidelity simulation is expensive, challenging to maintain and operate, and may lack contextual validity in low-resource or distributed settings. High-fidelity simulation is not always superior to lower-fidelity; it depends on the type of task involved and the learner's level.

IFEM represents emergency medicine (EM) learning in global contexts. These contexts exist on a spectrum with rural and remote EM in distributed settings closer to home, where low-fidelity simulation is sustainable and contextually relevant. Moreover, the use of local materials to make low-fidelity trainers can provide insight for learners into the social determinants of health when, for example, local and visiting learners attend village markets together to buy simulation materials. Low-fidelity simulation should be included as a learning tool for core EM knowledge, skills, and attitudes.

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REFERENCES

1. Hobgood C, Mulligan T, Bodiwala G, et al. International Federation for Emergency Medicine model curriculum for continuing professional development. *CJEM* 2015;17(3):295-309, doi:10.1017/cem.2014.79.
2. Maran NJ, Glavin RJ. Low- to high-fidelity simulation—a continuum of medical education? *Med Educ* 2003;37(s1):22-8.
3. Priest HA. Using simulation-based training to improve patient safety: what does it take? *Jt Comm J Qual Patient Saf* 2005;31(7):363-71.
4. Wiseman J, Snell L. The deteriorating patient: a realistic but "low-tech" simulation of emergency decision-making. *Clin Teach* 2008;5(2):93-7.
5. Munshi F, Lababidi H, Alyousef S. Low vs. high fidelity simulation in teaching and assessing clinical skills. *J Taibah Univ Med Sci* 2015;10(1):12-5, doi:10.1016/j.jtumed.201#85CBAB.
6. Norman G, Muzzin L, Williams R, et al. Simulation in health sciences education. *J Instr Dev* 1985;8(1):11-7.

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