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RESPONSE TO LETTER

In-Situ Simulation: Effective and Efficient? [Response to Letter]

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Dear editor

Thank you for the opportunity to respond to the issues raised in the letter by Abbass et al.[1] We appreciate Dr Rami Abbass and his colleagues for their keen interest in our paper[2] and for taking their time to express some concerns.

The disparity among the cohort of interns who had various previous experiences in resuscitation may be a confounding factor to analyze the impact of the simulation alone; however, it is not feasible to form a homogenous cohort of interns posted to the ED. Five to six interns are posted in the ED at different phases of their internship for one month duration. Clinical exposure and learning by the interns are variable and dependent on various factors like the quality and attitude of supervisors/coworkers, opportunities to learn, the availability of the case, equipment, academic sessions, workload, personal fear of harm to patient and medico-legal issues. To address this factor, we did separate analysis for those who had previous resuscitation experience and found a significant improvement in the knowledge score among this cohort as well.

Furthermore, individual-based simulation was recommended over the group-based simulation. We agree that one-to-one feedback would be preferred by interns as they feel more comfortable asking and clarifying questions regarding their performance. However, we feel that they should also learn to give and receive feedback with peers and develop non-technical skills like teamwork, communication and professionalism at this phase.[3] Simzone framework is described in an article where they have proposed four simzones.[4] Our simulation sessions encompass zone 3 and 4 where the simulation is employed for the purpose of team and system development. Interns usually have sufficient theoretical knowledge of resuscitation and have practiced it one-to-one (zone 1 and 2) during their undergraduate period; however, they are not well exposed and confident enough in managing critical cases in real scenarios. We believe that clinical competency is not only determined by individual clinical skills but also by the decision-making capacity and interpersonal skills which can be addressed by the simulation in a team. In situ simulation (ISS) will allow the interns to experience their actual work environment that could address any deficiencies in the individual, the team and the environment.

We totally agree that for the sustainability of the simulation, cost is a very important factor, especially in resource-limited settings. High-fidelity manikins, designated simulation suites and dedicated human resources are very expensive. ISS by virtue of its innate design reduces the cost and at the same time increases the fidelity of the simulation. Moreover, the indirect cost is low as the group of interns and the faculties

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running the ISS need not be released from the duty for the training purpose. We had done the cost analysis of the ISS previously which has been published recently.[5]

Undoubtedly, the suggestions given by the interns must be considered and implemented. Adding virtual component and video debriefing would definitely improve the effectiveness of the simulation. The Nepal basic life support Course, a video-based training module in Nepali language has been developed to target all health care personnel to orient them to this important skill.[6] We intend to improve the simulation sessions and plan for video debriefing once the fund is available.

Finally, we would like to emphasize that ISS provides an indispensable tool for continuing education for the interns and other multidisciplinary staff.

Disclosure

The authors report no conflicts of interest in this communication.

References

1. Abbass R, Bhatti U, Abbass A. In-situ simulation: effective and efficient? [Letter]. *Adv Med Educ Pract*. 2020;11:389–390. doi:10.2147/amep.s260027
2. Shrestha R, Badyal D, Shrestha AP, Shrestha A. In-situ simulation-based module to train interns in resuscitation skills during cardiac arrest. *Adv Med Educ Pract*. 2020;11:271–285. doi:10.2147/AMEP.S246920
3. Eppich WJ, Hunt EA, Duval-Arnould JM, Siddall VJ, Cheng A. Structuring feedback and debriefing to achieve mastery learning goals. *Acad Med*. 2015;90(11):1501–1508. doi:10.1097/ACM.0000000000000934
4. Roussin CJ, Weinstock P. SimZones: an organizational innovation for simulation programs and centers. *Acad Med*. 2017;92(8):1114–1120. doi:10.1097/ACM.0000000000001746
5. Shrestha R, Shrestha AP, Shrestha SK, Basnet S, Pradhan A. Interdisciplinary in situ simulation-based medical education in the emergency department of a teaching hospital in Nepal. *Int J Emerg Med*. 2019;12(1):19. doi:10.1186/s12245-019-0235-x
6. Shrestha R, Shresha A, Batajoo KH, et al. An experience of video based training on basic life support. *J Nepal Med Assoc*. 2018;56(212):774–780. doi:10.31729/jnma.3645