

First Aid Training for Non-Medical Professionals: The Need for Comprehensive Assessments [Letter]

Vinesh Sivaneswaran ¹, Supanki Julie Veliah ²

¹London North West University Healthcare NHS Trust, Ealing Hospital, London, UK; ²West Hertfordshire Teaching Hospital, Watford General Hospital, Watford, UK

Correspondence: Vinesh Sivaneswaran, Email vinesh.sivaneswaran4@nhs.net

Dear editor

We read with great interest the article by Ygiyeva et al,¹ discussing the importance of first aid training for individuals without a medical background. The study highlights a principal issue: the potential for non-medically trained individuals to provide life-saving assistance in emergencies. It is encouraging to see evidence that through in-depth training, individuals can significantly improve their first aid knowledge skills. However, we believe certain factors need addressing.

Firstly, the study relied solely on theoretical questions to assess knowledge, as referenced in Table 1.¹ However, it may be beneficial to incorporate practical or simulated scenarios into the assessment method. This is supported by Minna et al,² suggesting that a combination of theoretical and practical assessments is more effective in evaluating a candidate's confidence and first aid knowledge than just theoretical measures alone. Adding practical components, such as mannequin-based simulated scenarios could provide a more comprehensive evaluation of skills in real-life situations. Therefore, an integrated approach to assessment would strengthen theoretical knowledge and boost participant confidence.

Furthermore, the questionnaire primarily focussed on the resuscitation algorithm including compression-to-breath ratios and compression positioning. However, other learning objectives such as external bleeding, foreign body inhalation or convulsions were not assessed. This narrow focus could mean that students are more knowledgeable in one topic, but lack competencies in other course modules. Consequently, the questionnaire may not accurately reflect the cohort's overall knowledge, potentially skewing the data and overrepresenting participants' competencies.

A constructive alignment approach could improve the first aid survey by incorporating all of the intended learning objectives. As described by Hailikari et al,³ this assessment design aligns intended learning outcomes with assessment methods, facilitating deeper learning and improved knowledge retention. This approach would yield higher quality data, provide a more comprehensive assessment of participants' first aid skills and enhance academic outcomes.³

Lastly, the study's initial sample size was 643 participants but only 232 remained after one year, reflecting a substantial dropout rate of 64%. This raises concerns about attrition bias and challenges the study's validity and reliability. According to Schulz and Grimes,⁴ a drop-out rate exceeding 20% suggests the possible presence of attrition bias. With less than half of the original participants completing the study, the remaining sample may not be representative of the diverse professional groups initially enrolled. This high attrition rate could reduce the external validity of the study's results due to a disparity between original data and subsequent data samples.⁵

The questionnaires were distributed via online Google Forms, making it difficult to determine if certain groups have dropped out more frequently compared to others. To address this potential bias, further data collection could be performed on which employment groups responded at each time point, identifying trends or frequent drop out groups.

The conclusions drawn from this study are valuable, especially in emphasizing the importance of first aid training for non-medical staff. However, integrating these suggestions could lead to improved long-term knowledge retention and enhanced patient safety outcomes.

Disclosure

The authors declare no conflicts of interest in this communication.

References

1. Ygiyeva D, Pivina L, Messova A, et al. Evaluating the effectiveness of a first aid training programme for individuals without a background in medical education. *Adv Med Educ Pract.* 2024;15:773–782. doi:10.2147/AMEP.S471561
2. Minna S, Leena H, Tommi K. How to evaluate first aid skills after training: a systematic review. *Scand J Trauma Resusc Emerg Med.* 2022;30(1). doi:10.1186/s13049-022-01043-z
3. Hailikari T, Virtanen V, Vesalainen M, Postareff L. Student perspectives on how different elements of constructive alignment support active learning. *Act Learn High Educ.* 2022;23(3):217–231. doi:10.1177/1469787421989160
4. Schulz KF, Grimes DA. Sample size slippages in randomised trials: exclusions and the lost and wayward. *Lancet.* 2002;359(9308):781–785. doi:10.1016/s0140-6736(02)07882-0
5. Miller RB, Hollist CS. Attrition bias. *Encyclop Measur Statist.* 2007;1:57–60.

Dove Medical Press encourages responsible, free and frank academic debate. The content of the Advances in Medical Education and Practice 'letters to the editor' section does not necessarily represent the views of Dove Medical Press, its officers, agents, employees, related entities or the Advances in Medical Education and Practice editors. While all reasonable steps have been taken to confirm the content of each letter, Dove Medical Press accepts no liability in respect of the content of any letter, nor is it responsible for the content and accuracy of any letter to the editor.

Advances in Medical Education and Practice

Dovepress

Publish your work in this journal

Advances in Medical Education and Practice is an international, peer-reviewed, open access journal that aims to present and publish research on Medical Education covering medical, dental, nursing and allied health care professional education. The journal covers undergraduate education, postgraduate training and continuing medical education including emerging trends and innovative models linking education, research, and health care services. The manuscript management system is completely online and includes a very quick and fair peer-review system. Visit <http://www.dovepress.com/testimonials.php> to read real quotes from published authors.

Submit your manuscript here: <http://www.dovepress.com/advances-in-medical-education-and-practice-journal>

<https://doi.org/10.2147/AMEP.S494195>