

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

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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.

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