## Dear Editor,

I am writing to highlight the importance of pre-hospital training in undergraduate medical education, and how it could be integrated into the current curriculum, to better equip students with skills for treating patients in a medical emergency.

Emergency medicine is a valued part of the medical curriculum, and students can gain exposure in this field during clinical rotations. Whilst medical students recognise the professional responsibility of working within one's competency, as according to the GMC Good medical practice (2013), they do not feel confident or prepared using their clinical skills in a medical emergency (Xie JY, 2019). As a third-year undergraduate-entry medical student, I can appreciate this uncertainty of medical students as to the extent to which it is appropriate to take an active role in trauma and emergencies whilst on placement, despite recognising the importance to develop our skills. It is possible that this ambiguity is partly due to a gap in undergraduate medical school education or exposure in the pre-hospital environment which then translates into uncertainty in these situations as newly qualified doctors.

A voluntary medical student first responder scheme, currently used in 12 UK medial schools, is a volunteering opportunity for students to gain experience in independently treating patients in the prehospital environment (Orsi et al., 2022). Students involved have provided feedback stating the scheme assisted their professional development through learning how to confidently manage an acutely unwell patient. Whilst the scheme offers practice in utilising several skills that students would have already acquired during their medicine degree programme including basic life support (BLS) and immediate first aid, for managing medical emergencies, many students may not have pre-hospital training as part of their formal curriculum. A more formal and mandatory application of prehospital training within medical schools could potentially help better equip students for managing critically unwell patients as a future doctor.

There is significant evidence of the effectiveness and satisfaction of online simulation training of a major incident, and participants were encouraged to decide on the best next course of action depending on a given clinical scenario (Rajagopal et al., 2020). A similar method could be used across medical schools to deliver pre-hospital teaching to students.

In my experience, my university provided me with a 1 week in-person 'Major Incident Week' course which consists of lectures and clinical skills workshops, as well as a 1-day live simulation of a major incident. This simulation involves over 300 participants including students, actors, local fire and police services, ambulance service, and doctors. This course provides a unique and invaluable experience of utilising prehospital standards of practice in patient care and increase students' confidence when undertaking these clinical skills, by replicating the 'real-world' series of events. This training also increases student awareness of multiagency working to treat patients in a mass-casualty incident. Personally, the Major Incident Week encouraged an interest in emergency medicine as a career and increased my awareness on opportunities to learn various skills during the acute care rotation. The Major Incident Week is a unique learning opportunity as it enables an environment which is safe to practice practical skills and learn from mistakes outside of a real-life high-pressure environment like in A&E. When working as a newly qualified doctor, I will be able to reflect

on this experience with a greater insight into the multidisciplinary team and effective interpersonal communication.

Students that participate in simulation-based teaching show an improvement of performance-based test scores compared to those who have lecture-based teaching (Offiah et al., 2019), (Meyers et al., 2020). Students also feel more confident in their skills after practicing in a safe environment through simulation and student satisfaction increases. Students also find it helpful to learn skills prior to their clinical rotations (Meyers et al., 2020). This suggests that more of an interactive teaching/learning method may yield more positive student feedback.

The importance of pre-hospital training amongst medical students is clear, among many reasons, one of which is the different perspective of healthcare this opportunity provides but also the preparation given for managing patients in an acute scenario. As per my experience, a more formal interactive and simulation-based training mandated for medical students prior to the clinical years, in my opinion, could increase engagement and student's confidence when undertaking the acute care rotation and would enable medical students to be first responders should a member of the public require first aid. However, more research is needed into this field and student questionnaires could be a valuable method in assessing how engagement with pre-hospital training could have an impact on future career aspirations and development of learning.

## **Danielle Furness**

3<sup>rd</sup> year medical student at the University of Buckingham Email: 2017714@buckingham.ac.uk

## References

(2013) Good medical practice-english - gmc. Available at: https://www.gmc-uk.org/-/media/documents/good-medical-practice---english-20200128\_pdf51527435.pdf?la=en&hash=DA1263358CCA88F298785FE2BD7610EB4EE9A530 (Accessed: 26 October 2023).
Meyers L;Mahoney B;Schaffernocker T;Way D;Winfield S;Uribe A;Mavarez-Martinez
A;Palettas M;Lipps J; (2020) The effect of supplemental high fidelity simulation training in medical students, BMC medical education. Available at:
https://pubmed.ncbi.nlm.nih.gov/33172450/ (Accessed: 21 October 2023).
MB;, R.A.N. (2020) Simulated mass casualty incident triage exercise for training medical personnel, Journal of education & teaching in emergency medicine. Available at:
https://pubmed.ncbi.nlm.nih.gov/37465326/ (Accessed: 21 October 2023).
Offiah, G. et al. (2019) Evaluation of medical student retention of clinical skills following simulation training - BMC Medical Education, BioMed Central. Available at:
https://bmcmededuc.biomedcentral.com/articles/10.1186/s12909-019-1663-2 (Accessed: 21 October 2023).

## Medical Student's Perspective on Prehospital Training

Orsi, A. et al. (2022) Perceptions and experiences of medical student first responders: A mixed methods study - BMC medical education, BioMed Central. Available at: https://bmcmededuc.biomedcentral.com/articles/10.1186/s12909-022-03791-z (Accessed: 21 October 2023).

Xie JY, Frost, Meakin, (2019) Not quite a doctor, but should I help? A qualitative exploration of medical students' attitudes towards responding to medical emergencies that occur in the public domain, BMJ open. Available at: https://pubmed.ncbi.nlm.nih.gov/30962243/ (Accessed: 21 October 2023).