

PREHOSPITAL EXPOSURE: Pushing Boundaries in Medical Education



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"It is a common misconception that doctors, both newly qualified and well-established practitioners, can deal with emergency pre-hospital

Quote from 'Pre-hospital care—the evolution of a course for undergraduates' 1

Introduction

Education in Prehospital Medicine is incredibly lacking in the average Medical School curriculum.²,³ This means that we are both underequipping our future doctors 4 and cutting off the supply of fresh talent into the prehospital world. Studies have shown that **students are** hungry for prehospital teaching, with available experiences having exceptionally high attendance rates. 1,5 However, the opportunities available to students are often limited and expensive.

We as professionals have a duty to share our knowledge with colleagues, 6 especially as there are many benefits to spending time in the prehospital environment (see 'Advantages' section). If we want to maintain and grow our pre-hospital community, we need to push boundaries in prehospital education and make it more accessible for everyone. This poster is about how Bowland Pennine Mountain Rescue Team (BPMRT) are doing their bit, and hopefully through engagement with the poster we can inspire others and improve and expand our own practise when it comes to inducting students into the world of prehospital medicine.

Aims of the Project

- To expose students to prehospital medicine during their time at university and **push the boundaries** of the current university syllabus
- To introduce students to Mountain Rescue and what being a team member involves
- Spread the word about mountain safety
- Lay the foundation for the next generation of Mountain Rescue volunteers
- To generate discussion about prehospital medicine and student involvement in order to inspire and learn from other teams/companies doing similar projects

Student Satisfaction 96% 96% 86% Satisfaction with Satisfaction with Relevance of overall event activities learning experience

Figure 1 – Student satisfaction data from latest Mountain Rescue taster weekend

What we've done so far...

Stretcher Assault Course



- becomes a casualty and has a ride on the stretcher Fellow students then carry
- them over a predetermined assault course over the moors and through the Rescue Centre

• The favourite activity by far

A member of the group

- Just as the students get comfortable, we get them to cross a stream, go over a fence and then use a snake belay to lower their teammate down a steep slope • This encourages team working,
- communication skills and highlights the importance of ongoing casualty care and communication during an evacuation. Generally, the worse the weather the better the experience

Prehospital Medical Simulations



- An afternoon spent in the outdoors using Mountain Rescue kit in several medical simulations
- Goes ahead no matter what the weather
- Moulage used with casualty volunteers to make the station more realistic
- Feedback given after the station from a team member and the casualty

Mountain Rescue Kit Workshops



- A kit carousel allows the students to have hands-on experience with Mountain Rescue kit
- This normally involves workshops on the Medical Bag, the Splint Bag and Vacuum Mattress, the Medical Gases and the Bell Stretcher
- Applying splints, building a stretcher and fitting blast bandages to their colleagues allows them to play with kit not normally seen in the hospital setting

Team Building Activities



- Team building exercises, icebreaker games and competitions ensure everyone gets to know each other during the activity weekend
- Students often come from different societies and courses and so by breaking the group down into smaller teams we make it easier for cross-course and cross-year working

Throughout the activities we run we encourage hands-on learning, cross-course/cross-year team building and facilitate the opportunity for students to teach each other new skills - breaking barriers down between groups that may otherwise traditionally not interact with each other at university.

Advantages & Challenges

- ADVANTAGES

- Generate interest in Mountain **Rescue** and prehospital medicine
- Spread the message about mountain safety and
- **ADVENTURESMART.UK** 7 Help students realise their
- outdoors and prehospital potential
- **Increase confidence** in the outdoor environment 4
- Make students more rounded people in their future careers 8
- Team building/working alongside other agencies
- **Inclusive** subsidised by University grants and run by volunteers to make the course much **more affordable** for students

CHALLENGES

- Limited to the local area so far
- Time intensive
- **Increased volunteer hours** on top of already high Mountain Rescue demand
- Moderate number of team members needed to run the
- weekend
- Coordination with other teams/companies offering similar courses





Scan here to leave some feedback on the poster

Feedback

At the end of each team experience we ask for feedback so we can improve our performance for next time. Below is some of the feedback we've had so far...

"Amazing interactive session. Really good to see and use the equipment"

"Excellent presentation. Really good example scenario"

"[I liked] learning from

the team and

socialising as a society'

"Got an insight into Rescue medicine"

"Really enjoyed the search and rescue activity and the complex incident management talk"

"I loved the whole trip...I especially really enjoyed he last activity on Saturday where we had to 'find: and rescue' our teammate - it allowed us to practise everything we'd learnt that day but didn't feel like an exam!"

Figure 2 – Feedback from students (from team talks & experience weekends)

Conclusion

Hopefully, this poster has:

- 1) demonstrated what BPMRT have done so far to readdress the balance in prehospital exposure and access to prehospital medicine
- 2) generated discussion about how we can push boundaries in medical education to make prehospital medicine more inclusive Exposure to prehospital medicine improves "acute care knowledge, interpersonal skills and interprofessional understanding", 8 so why not consider branching out in your day job/rescue team to help the cause? As can be seen in Figures 1&2, satisfaction and feedback from the courses

we've run so far has been very positive. However, we need your help to improve and grow, and so if you can think of any way in which we can do this, let us know by scanning the QR code above. Thanks for reading!

Team Lectures/Student Society Fairs -

Destruction of Comfort Zones



• As a team we have done student talks for several universities and have been invited to speak at local conferences

Pushing boundaries is very

run as we want to **push**

Doing this allows students

and hopefully gives them a

to realise their potential

taste for the outdoors

students out of their

comfort zones

relevant to the activities we

talks and attended career fairs for the Manchester Royal Preston Hospital

• We've also done career Medical School students at

• We ask students from local universities to be involved in our training events

1) Allison, K., et al. (2002). Pre-hospital care—the evolution of a course for undergraduates. Resuscitation. 52(2):187-191 https://www.sciencedirect.com/science/article/abs/pii/S 157201004609 2) Larsen, J., et al. (2019). Mountain Rescue Casualty Care and the Undergraduate Medical Elective. Wilderness & Environmental Medicine. 30(2):210-216 urnal.org/action/showPdf?pii=S 1080-6032%2818%2930226-6 3) Antrum, J. and Ho, J. (2015). Prehospital emergency care: why training should be compulsory for medical indergraduates. Emergency Medicine Journal. 32:171-172 https://emj.bmj.com/content/32/2/171 4) Powell, L., et al. (2021). 'Is there a doctor on board?' Preparing students for life as a doctor beyond the clinical environment, a oilot study. Resuscitation Plus. 5:100074 https://www.sciencedirect.com/science/article/pii/S2666520420300758 5) Wheeler, C. (2015). PRE-HOSPITAL EMERGENCY SKILLS FOR MEDICAL STUDENTS. Emergency Medicine bmj.com/content/32/12/1001.2 6) Get to know GMC Good medical practice 2024. (Accessed: September, 2023). General Medical Council. Retrieved from: https://www.gmc-uk.o 4-final---english_pdf-102607294.pdf 7) Adventure Smart.UK. (Accessed: September, 2023). Retrieved from: https://www.adventuresmart.uk 8) Nijhawan, A., et al. (2021). Medical students in the re-hospital environment - An untapped resource for undergraduate acute care and interprofessional education. Med Teach. 44(4):372-379. https://pubmed.ncbi.nlm.nih.gov/3472374