

1HR ON-CALL — Using simulated on-call to underpin experiential learning in final year medical students

AIM

To better prepare final year medical students for their on-call experience as Foundation Year (FY) Doctors.

BACKGROUND

A survey of Blackpool FY1 doctors found limited training in being on-call. The GMC requires undergraduate medical education to prepare medical students for their first day in practice^[1]. Working out of hours, on-call and with a reduced workforce is a known area of angst amongst junior doctors^[2,3]. We developed a voluntary simulation teaching programme to allow final-year medical students to experience the pressures of being on-call. We hoped to emulate internal and external stressors within a safe environment using the theory of experiential learning to consolidate their knowledge.

METHODS

Prior to the session we contacted the students to identify the needs and perspectives of the learners at an individual level for this teaching. Students held a bleep for an hour and were sent throughout the hospital to complete various on-call tasks. These were relatively simple and revolved around resourcefulness, communication and triage skills. The focus of the course was to support their development and the non-technical skills around the on-call, rather than assessment of their performance in the individual tasks. Various resources were available including the number for the medical registrar, played by supervisors. The final station was an unwell patient aimed at drawing the students immediately to this scenario. The programme used Kolb's experiential learning cycle as the theory to enable student learning^[4] and the facilitated feedback session allowing students to reflect on positive and negative experiences, using Gibb's reflective cycle^[4]. Following this, the students completed a Likert scale feedback questionnaire with a space for free text comments.

RESULTS

The numbers involved in the programme have varied each year dependent on the number of final medical year students placed at Blackpool. Over the three years, 17 students have participated in the programme. The results have been resoundingly positive with students gaining confidence from the programme and 100% of students recommending both individual and cohort repetition. During the open feedback session, students valued using actual wards and having to navigate unfamiliar areas of the hospital as a realistic preparation for the Foundation year.

AUTHORS

Manalayil, J¹ (MBCChB), Ball, A¹ (MBCChB), Chevalier, D¹ (MBCChB), Muston, A¹ (MBCChB)

¹Blackpool Victoria Hospital

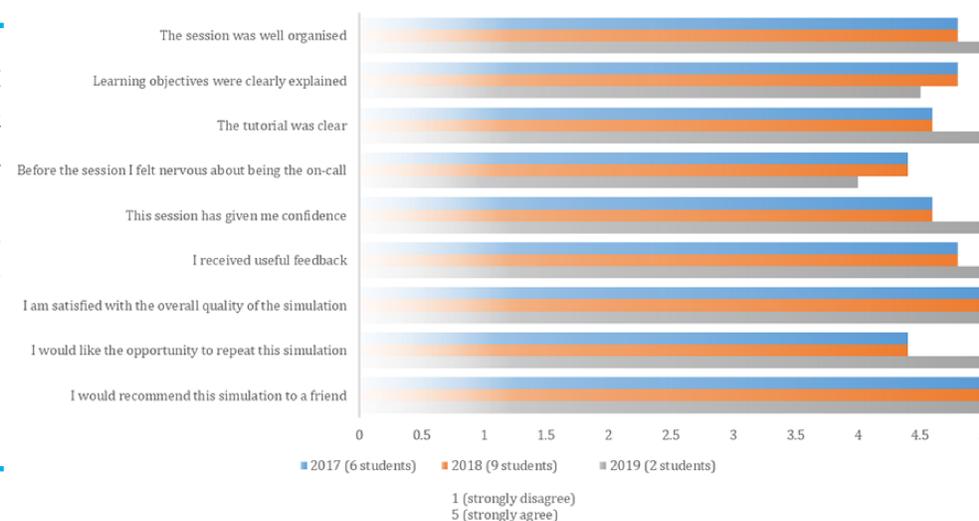


Fig 1. Graph of feedback summary over three years.

	2017	2018	2019
What were the positive features of this simulation?	"Great introduction to holding a bleep" "Lots of support when required" "Good opportunity to navigate around the hospital and prioritise"	"Really useful, realistic simulation" "Good feedback + real life situations" "Good to go around the hospital"	"Several tasks to prioritise"
What could we do to improve this simulation?	"Individual feedback on paper" "Repeat once or twice"	"More sessions" "Individual feedback"	"More sessions"
Any further comments:	"Excellent session"	"Excellent session"	"One of the most useful learning experience in preparation for being a junior doctor" "Helped realise the importance of prioritising jobs"

Table 1. Free text comments from feedback questionnaire.

DISCUSSION

Being on-call is an inevitable part of a junior doctor's job role and we believe there is scope for better preparation within undergraduate training. There is a strong tradition in medicine of learning on the job, which historically supports the use of experiential learning theory in medical education.

With societal changes and technological advances there is growing evidence for the use of simulation in preparing medical students for their role as a junior doctor^[5,6,7]. The results from our simulated on-call suggest that the programme is an effective approach in bridging the gap between theory and practice regarding on-calls. Reflection is also crucial for the active process of learning, and the facilitated debrief utilised Vygotsky's theory of the zone of proximal development to help identify areas for students to improve as well as a guided Gibb's reflective cycle to enhance student learning^[8]. The debrief allowed students to better make sense of their role as an on-call doctor and assisted them in the prioritising and accomplishment of tasks. We appreciate that the participants were self-selected, and therefore the results may be affected by volunteer bias.

CONCLUSION AND FUTURE

We have developed an effective and sustainable simulation that has shown excellent results at the time of teaching and two years on. Due to the positive reaction, low maintenance, and reproducibility of the project, we aim to cement our teaching programme as a permanent feature for undergraduate students at Blackpool Victoria Hospital. We aim to expand this to involve other essential skills required by an FY doctor, for example, the potential of using simulated ward rounds as a teaching method. This will be part of a larger programme with more emphasis on preparing for practice during the final year at hospital.

REFERENCES

- gmc-uk.org. (2018). *Tomorrow's Doctors: Outcomes and standards for undergraduate medical education*. [online] Available at: http://www.gmc-uk.org/Tomorrow_s_Doctors_1214.pdf_48905759.pdf [Accessed 29 Oct. 2019].
- Goldacre, MJ, Lambert, T. and Evans, J. (2003). Preregistration house officers' views on whether their experience at medical school prepared them well for their jobs: national questionnaire survey. *BMJ*, 326(7397), pp.1011-1012.
- Kellett, J, Papageorgiou, A., Cavenagh, P., Salter, C., Miles, S. and Leinster, S. (2015). The preparedness of newly qualified doctors – Views of Foundation doctors and supervisors. *Medical Teacher*, 37(10), pp.949-954.
- Yardley, S., Teunissen, P. and Dornan, T. (2012). Experiential learning: Transforming theory into practice. *Medical Teacher*, 34(2), pp.161-164.
- Morgan, J., Green, V. and Blair, J. (2017). Using simulation to prepare for clinical practice. *The Clinical Teacher*, 15(1), pp.57-61.
- Fisher, J., Martin, R. and Tate, D. (2014). Hands on + hands free: simulated on-call interaction. *The Clinical Teacher*, 11(6), pp.425-428.
- Dickinson, M., Pimblett, M., Hanson, J. and Davis, M. (2014). Reflecting reality: pager simulations in undergraduate education. *The Clinical Teacher*, 11(6), pp.421-424.
- Esteban-Guitart, M. (2018). The biosocial foundation of the early Vygotsky: Educational psychology before the zone of proximal development. *History of Psychology*, 21(4), pp.384-401.