Incorporating sequential simulation into blood transfusion mandatory training.

Dr Andrew Lonsdale

Station 1 – Initial ED assessment

Station 2 – Discussion with Registrar

Station 3 – Administer transfusion

Station 8 – Debrief

'Every single station was perfect. I have learnt so much! Thank you!'

Station 4 – Rest Station

Station 7 – Breaking bad news

Station 6 – Managing an acute arrest

Station 5 – Managing transfusion reaction

Introduction

Mandatory training is often where a certificate shows compliance not competence[1]. Sequential simulation (SqS) can be used to improve learner performance when compared to conventional simulation[2]. This SqS was delivered to the 25, 4th and 5th year medical students and integrated SqS with their blood transfusion mandatory teaching. The focus of this study was to assess the effectiveness of SqS by measuring change in confidence regarding their assessment and management of blood transfusion.

Methods:

The simulation followed a patient through a SpS circuit. To evaluate learning the students were assessed on GMC core practical procedure '[the] delivery of a safe and appropriate blood transfusion'. Following completion of the circuit all students were invited to take part in an evaluation survey, all of which responded.

Student self-assessment confidence score, pre and post SqS

Pre-SqS confidence	63.6
Post-SqS confidence	80.8

■ Student self-assessment confidence score (%)
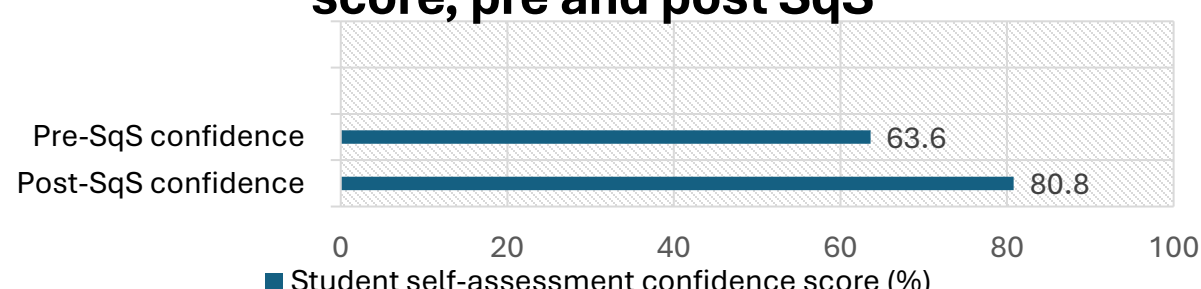
Chart 1 – Mean pre- and post- SqS confidence

Results

All 25 students reported that mandatory training in the form of SqS worked well. Pre-simulation confidence was a mean of 63.6% and post-simulation confidence, 80.8%, demonstrating an increase in confidence of 27%. When asked to rate SqS as a method of teaching and assessment, the students rated SqS an average of 9.7/10.

Discussion

SqS has shown to be a valuable tool
Further development should be considered of how SqS could be applied to other key skills.

Would you find more sessions like this useful? YES, PLEASE!!!

Any other comments? Excellent session

Would you find more sessions like this useful? 100%. Fantastic learning opportunity.

Any positives you would like to comment on? Every single station was perfect. I have learnt so much! Thank you!

Any positives you would like to comment on? Pt journey really useful, great feedback given

Any other comments? 10/10!!

Any other comments? Really enjoyed it

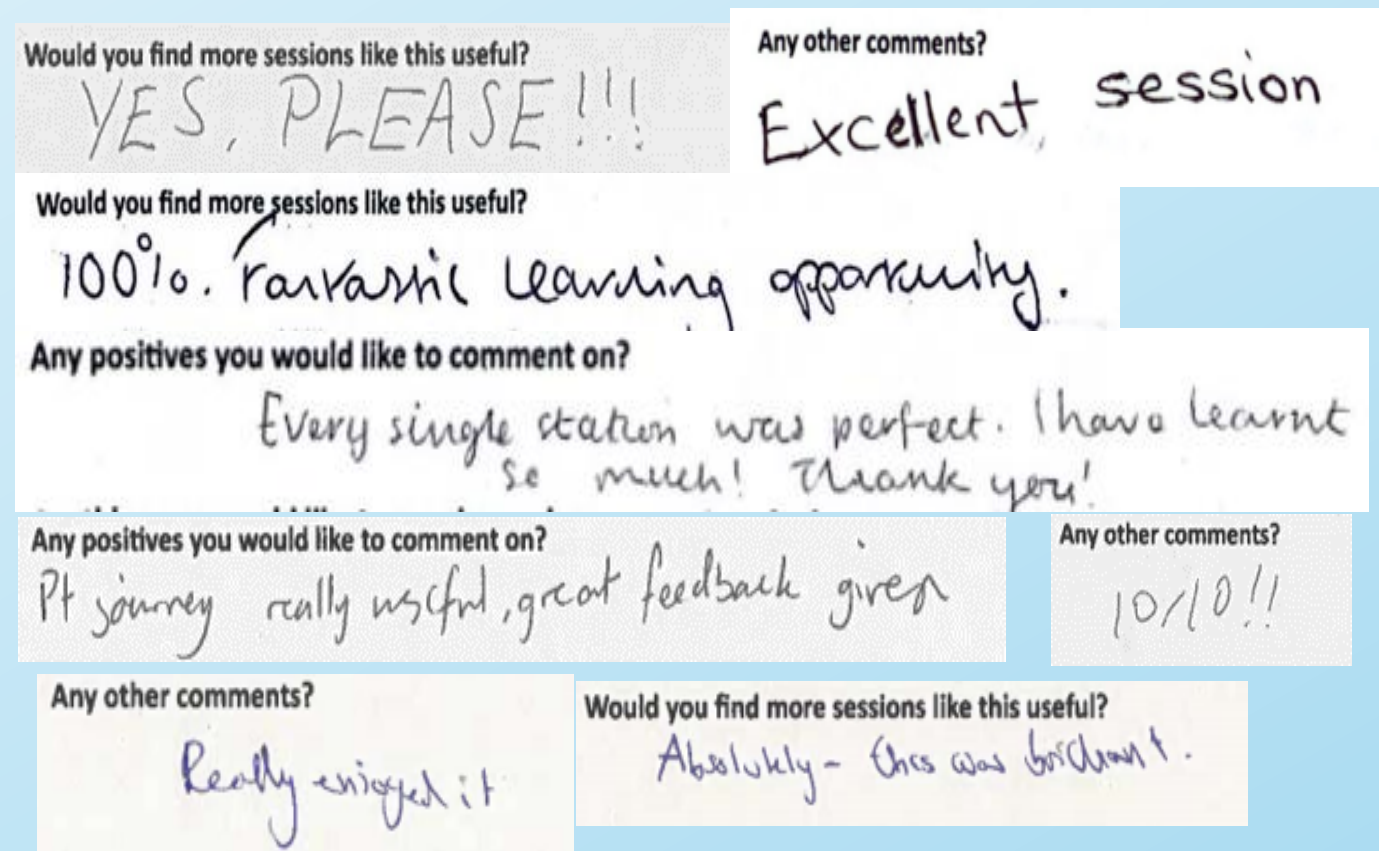Would you find more sessions like this useful? Absolutely - this was brilliant.

Image 1 - A collection of written feedback.

References
1. Garcarz W, Wilcock E. Statutory and mandatory training in health and Social Care. 2018 Oct 8; doi:10.4324/9781315378626
2. Oglesby, K. and Bell, M. (2016) 'Sequential simulation: The one heart experience', *The Clinical Teacher*, 13(4), pp. 317–317. doi:10.1111/tct.12512.