

High-fidelity simulation for paediatric trainees: An assessment of costs and trainee perceptions

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Abstract

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Context

High fidelity simulation has been shown to be a valuable learning tool in paediatrics¹ along with courses aimed at paediatric trainees moving to level two training which are becoming routine in the United Kingdom². One of the most commonly cited barriers to simulation is cost³ however there is limited literature about the specific running costs associated with high fidelity simulation⁴.

Description

We delivered a high-fidelity simulation course for paediatric trainees who were due to progress to level two training. The aim of the course was to prepare them for this transition by simulating common scenarios that they may not have encountered or led in their current roles. The day consisted of six high fidelity clinical simulations and three communication skills scenarios. Formal feedback was collected on the day and again one month after trainees had started in their new posts.

Observation/Evaluation

All paediatric ST3 trainees within the East of England were invited to attend the course, 12 registered and 10 attended on the day.

The cost of the simulation centre was £1,800 including faculty. Course administration was performed by senior paediatric trainees facilitating the day and therefore incurred no additional cost. The overall cost per trainee was £150.

Feedback was received from 8/10 trainees on the day and one month after commencing their registrar posts. Trainees valued scenarios they perceived to be relevant to their everyday practice, targeted their specific stage of training and provided personalised feedback.

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Trainees felt the course improved their confidence in becoming a registrar and this was maintained after starting their new posts. They felt that simulation in groups of more than 2 reduced the value of the feedback they received.

Discussion

High fidelity simulation centres offer a fixed cost per day therefore increasing delegate numbers improves cost-effectiveness. Delegates valued simulation that addressed their specific learning needs and preferred scenarios in pairs because of the more focused exposure and feedback. We hypothesise that high fidelity simulation in pairs therefore provides the most cost-effective outcomes.

References

- 1 Eppich W, Adler MD, McGaghie WC. Emergency and critical care paediatrics: use of medical simulation for training in acute paediatric emergencies. *Curr Opin Paediatr* 2006;18:266–71.
- 2 Moore H, Vrach AA, Lok A, et al. Immersive Paediatric Simulation: Implementation of a Mandatory Regional Paediatric Simulation Course. *The Journal of the Society for Simulation in Healthcare*. December 2013; 8(6):471
- 3 Linda Clerihew, David Rowney, Jean Ker. Simulation in paediatric training. *Arch Dis Child Educ Pract Ed* 2016;101:8-14
- 4 Zendejas B, Wang AT, Brydges R, et al. Cost: the missing outcome in simulation-based medical education research: a systematic review. *Surgery* 2013;153:160–76