Stepping into the future: A high-fidelity virtual simulation pilot

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BACKGROUND

- High-fidelity simulation aids development of technical and non-technical skills[1]
- However, it is resource-intensive and costly, restricting delivery[2]
- Live-streaming could increase access to high-fidelity simulation

METHODS

- We ran an East of England Hub Day involving **virtual high-fidelity simulation** for foundation trainees in the region
- Simulations centred around **SimMan 3G** (Laerdal)
- Three faculty acted as doctor-avatar, nurse-assistant and technician/patient
- The doctor-avatar wore a **GoPro HERO8 Black** streaming via **Zoom**
- Attendees instructed the avatar through a headset
- Evaluations involved pre- and post-session questionnaires of quantitative (**Likert-scale**) and qualitative (**free-text**) questions

RESULTS

- **35/35** attendees completed the **pre-session** questionnaire; **32/35** completed the **post-session** questionnaire
- Respondents who strongly agreed they felt confident in assessing and managing acutely unwell patients increased from 2 (**5.7%**) to 11 (**34.4%**)
- Respondents who strongly agreed or agreed they felt confident in implementing simulation debriefing techniques increased from 15 (**42.9%**) to 29 (**90.6%**)

Figure 1. *Doctor-avatar and nurse-assistant with SimMan 3G and control station*

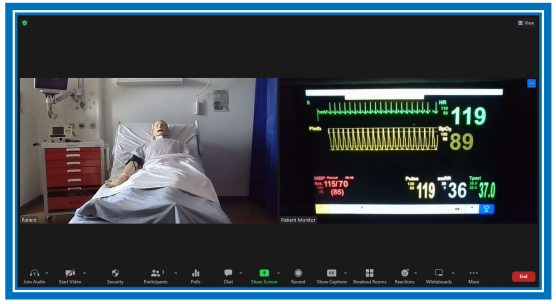

Figure 2. *Screenshot of attendee view on Zoom*

KEY MESSAGES

- Novel virtual high-fidelity simulation is **effective in improving doctors' confidence** in **assessment of acutely unwell patients** and **simulation debriefing techniques**
- Virtual high-fidelity simulation could be **effective in increasing simulation access** and warrants further research to understand effectiveness in comparison to in-person training

REFERENCES

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