IN PRACTICE

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SIMULATING CHANGE: CO-PRODUCED MULTI-DISCIPLINARY TEAM SIMULATIONS FOR TRANSFORMATION IN A NEWLY BUILT MATERNITY DEPARTMENT

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Introduction: University Hospitals Dorset (UHD) relocated maternity services into a newly constructed building. Transformational simulation is an effective method for identifying safety threats and driving healthcare improvements [1]. Research is limited on transformative simulation for maternity relocations. This project aimed to use simulation to identify latent safety threats in a new maternity unit and explore the impact on staff.

Methods: Prior to opening, twenty mandatory in situ Multidisciplinary Team (MDT) simulation days were delivered for 682 staff due to work in the new maternity unit. Simulations were co-produced and co-facilitated by simulation, maternity, obstetrics, anaesthetics, transfusion, theatres and porters. Participants received a day's training, split into three groups of 10–15 people incorporating orientation and rotation through three simulations - Sepsis, Major Obstetric Haemorrhage and Eclampsia – running simultaneously. Simulations required transfers, with locations varied to identify safety risks throughout maternity. MDT debriefs identified safety threats, which were recorded on a risk log and escalated to senior management. Mixed-method data was collected via participant questionnaires after each day to assess impact on staff.

Results: Main safety threats:

- Increased time for blood collection, due to increased distance from transfusion.
- Removal of dedicated maternity porter.
- Staff not trained in blood collection.
- Unfamiliarity with department name and location during emergency phone calls.
- Lack of adequate signage.
- Staff injured during pool evacuations due to new shaped birthing pool.

Improvements:

- Increased O-negative blood supply in Maternity emergency fridge.
- Automatic printing of blood collection slips to transfusion.
- Allocation of general porter for urgent blood collection.
- Staff blood collection training.
- Location prompt cards adjacent to phones.

- Improved flag style wayfinding signage.
- Suspension of new birthing pools until alternative evacuation equipment tested.

Impact on staff: Most participants reported increased confidence; 25% reported no change, and 7% reported a decline.

92% felt positive their contributions were valued.

Discussion: This project identified latent safety threats within a new maternity unit using in situ simulation, leading to real-time improvements. While the overall impact on staff was positive, the decrease in confidence for some - likely due to the identification of safety threats without immediate solutions - suggests the need for further research on managing staff confidence whilst identifying safety threats. Feedback highlighted the value staff placed on orientation simulations, expressing a desire for further sessions. Key lessons for future transformative simulation include the importance of sufficient equipment in proposed locations, formal safety escalation processes and timely feedback to participants.

Ethics Statement: As the submitting author, I can confirm that all relevant ethical standards of research and dissemination have been met. Additionally, I can confirm that the necessary ethical approval has been obtained, where applicable

REFERENCES

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