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**Background and aim:** Clinical placements are an essential part of physiotherapy education, providing students with the opportunity to gain practical experience in clinical settings. Due to the limited number of available placements [1], and the fact that simulated placements have emerged as an innovative approach to placement experience [2], we co-produced (HEI and simulation-based education provider) a placement programme for 80 BSc and 30 MSc undergraduate physiotherapy students. We describe the structure of the well evaluated and replicable large-scale simulated placement.

**Activity:** Each student was provided with 40 simulated placement hours over one week, this was divided between hands on facilitated simulation, with follow-up synthesis and reflection of the learning outcomes. The facilitated sessions with actor role players centred around authentic scenarios which were level-matched and closely aligned with the HCPC Physiotherapy Standards of Proficiency [3]. The scenarios reflected the diverse society in which we live, with actors taking on roles of patients/relatives and colleagues, from a range of backgrounds, with differing demographics and characteristics, presenting in a broad range of situations. Students were able to reflect on their interactions, before, during and after the simulation; they received objective feedback from the actor, from the unique perspective of patient/relative or colleague, they received feedback from their peers and from the facilitator.

**Findings:** The simulated placement, for both sets of students, was a resounding success. Both groups (BSc and MSc) worked through 10 scenarios. The larger BSc group required 20 separate facilitated sessions and 40 actors. For the MSc group, there were 5 facilitated sessions and 10 actors. As always, sustainability of programmes is linked to budget. Although a quantified analysis is yet to be completed, the time taken to organize the placement, write matched scenarios with clear learning outcomes, deliver the placement and evaluate, is time consuming. Continued co-production with shared facilitation (HEI and education provider) is a potential way forward, with re-use of scenarios and rotations; it is highly replicable, with a team of experienced facilitators and actors.

**Conclusion:** Simulated clinical placements provide physiotherapy MSc and BSc students with a valuable, realistic learning experience, in a safe and supportive, facilitator-led environment. The placement was found to be effective in enhancing students' communication skills, professionalism, empathy, and compassion. Involving actors was found to be an effective way of immersing students in realistic clinical scenarios. This is a reusable resource, so considering 'return on investment' would suggest repeating for future students.

**Ethics statement:** Authors confirm that all relevant ethical standards for research conduct and dissemination have been met. The submitting author confirms that relevant ethical approval was granted, if applicable.

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## EDUCATION

A49

### FIVE YEAR REVIEW OF PAEDIATRIC MULTIDISCIPLINARY IN-SITU SIMULATION ON A GENERAL PAEDIATRIC WARD

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**Background and aim:** In the United Kingdom, trainee doctors rotate through different specialities during their training. They are often unfamiliar with systems, environments, and personnel. Working on a general paediatric ward in a district general hospital can be anxiety inducing for those new to paediatrics.

Fortnightly low-fidelity simulation scenarios are embedded in our local teaching schedule to improve confidence amongst the medical and nursing team. These are performed on the ward addressing varied scenarios, aiming to increase confidence with clinical cases, improve local environment and systems awareness, and enhance communication between professionals.

**Methods:** Fortnightly 30-minute simulation sessions are run by the paediatric simulation team on the paediatric ward at our trust. The wider multidisciplinary team are invited, including nurses and health care assistants. The emergency buzzer from a bed space is pulled, and those involved attend and a scenario is undertaken. The scenario is structured to involve the wider team to improve interdisciplinary working and non-technical skills, as well as address clinical outcomes. Equipment is provided using a grab bag. Once the scenario has ended, a debrief is performed involving candidates and observers of all disciplines, to discuss technical and non-technical skills.

Post session feedback was collected on each occasion with quantitative data via Likert scales and qualitative data by free text questions.

**Results:** In-situ simulation has been part of the departmental paediatric teaching rota since 2009 but has been a regular fortnightly occurrence since 2018. This is because it has been rostered into our working hours before the medical team assume clinical duties.

We have collected feedback since September 2018. We have had 616 participants and delivered 82 scenarios in the clinical environment. This includes during the Covid pandemic. The weighted average confidence recorded by candidates pre-scenario was 2.51 with confidence post-scenario recorded as 3.69. 83% reported improved confidence following the scenario. This is an important finding as 45% had never encountered the scenario before in their practice.

Thematic analysis has highlighted key aspects including communication, escalation, teamwork and available resources.

**Conclusion:** In-situ, low fidelity simulation is an effective tool to improve human factors amongst the multidisciplinary team on a

paediatric ward. By regularly simulating clinical practice in their daily working environment, all candidates have demonstrated improved clinical confidence and better familiarity with the ward environment. Additionally, the fortnightly in-situ simulation has improved working relationships through recognition of the roles of the ward multidisciplinary team, communication skills and team and leaderships skills.

**Ethics statement:** Authors confirm that all relevant ethical standards for research conduct and dissemination have been met. The submitting author confirms that relevant ethical approval was granted, if applicable.

## REFERENCES

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## CONTENT

A50

### THE SEIPS GAME: AN INTERPROFESSIONAL TEACHING AID TO PROMOTE UNDERSTANDING OF HUMAN FACTORS IN HEALTHCARE

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**Background and aim:** As a human-factors focused simulation centre, we begin all our simulation courses with a human factors workshop introducing participants to the SEIPS model of human factors [1]. This enables them to explore systems-based impacts on clinical practice during post-scenario debriefs. However, we have noticed that some participants struggle to identify and discuss human factor themes which impact on them in their workplace. We aimed to develop an innovative teaching aid which would promote participant understanding and engagement.

**Activity:** Previous experience has provided evidence that participants enjoy simulation games. Therefore, we chose to develop a table-top game to play with participants based on the SEIPS work system. We worked with interprofessional colleagues to identify factors that help and hinder processes in the work system and categorized them under SEIPS headings. We made a series of cards based on these factors which participants collect. The winner was the person who collected a helpful card for each SEIPS heading first.

**Findings:** We have piloted our SEIPS game with interprofessional faculty, including those with specialist expertise in human factors in healthcare. We surveyed participants to obtain feedback. Survey results so far include data contained in [Table 1-A50](#), and the following participant comments:

- ‘Play’ is a kinaesthetic way of learning and helps embed ideas and thinking. It also can create opportunities for discussion on different headings for human factors and systems thinking.
- The examples are fun but are also realistic so helps you see how HF is relevant. With the examples of human factors in the game it could be useful for staff with little clinical experience.
- Liked the competitive element and the examples helped expand on what SEIPS was and how it could be relevant to lots of areas.

### Table 1-A50: SEIPS game participant survey results

100% of participants enjoyed playing the SEIPS game.

100% of participants felt the SEIPS game could increase participants understanding of human factors in healthcare.

100% of participants felt the SEIPS game could help participants identify human factors impacts on their own work system.

**Conclusion:** We have developed a SEIPS game to facilitate discussion of human factors in healthcare. This novel approach has received positive initial feedback following our pilot. We are confident we can now move forward to integrate our SEIPS game into our Foundation Doctor's simulation programme from August 2023. Following this, we intend to continue the process of data collection and analysis, with the intention of incorporating our SEIPS game more widely across simulation courses within various clinical specialties in future.

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## TECHNOLOGY

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### EDUCATIONAL EFFECTIVENESS OF A HIGH-CONSEQUENCE INFECTIOUS DISEASE TRAINING COURSE USING ULTRAVIOLET SIMULATION

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**Background and aim:** High-consequence infectious diseases (HCID) are pathogens which spread easily between people, have high mortality rates, and lack effective treatment [1]. Examples include Ebola and Lassa fever. Most emerging pandemics, including COVID-19, are initially classified as HCID. Assessment of patients with suspected HCID infection is an advanced procedural skill requiring application of enhanced infection control measures including patient isolation, personal protective equipment, and decontamination. There is a risk of healthcare worker infection if procedures are not followed [2]. HCID often present in non-specialist centres; there is a need for an accessible, educationally effective HCID course for NHS staff.

**Activity:** We developed a course for clinicians in infectious disease and emergency medicine, in collaboration with the Health & Safety Executive and clinicians in the UK-HCID network. The course uses a blended approach; theoretical components are taught with online learning. Practical components are taught with high-fidelity, multidisciplinary simulation using VIOLET, a mannequin which coughs, vomits and sweats ultraviolet markers ([Figure 1-A51](#)) [3]. This simulates airborne, contact and fomite transmission, allowing visualization and debrief of contamination before and after PPE removal. Training