## PLANNING AN IMMERSIVE MULTI-AGENCY MAJOR INCIDENT SIMULATION

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**Background:** When multi-casualty, major incidents occur, an interprofessional response is required [1] and management of these is usually the responsibility of specially trained, experienced staff. Our aim was to pioneer an immersive interprofessional major incident simulation, involving several disciplines and undergraduate paramedic students.
**Activity:** Nursing, paramedic, media, journalism, audio technology, and law academics were brought together with Scottish fire and rescue service (SFRS) staff to plan and deliver the simulation. The programme for the day was developed collaboratively and set to achieve a combination of discipline specific and generic interprofessional learning outcomes. As each simulation consisted of multiple casualties, team scenario writing sessions were used to develop storyboards for each casualty. As this exercise had the potential to provoke an emotive response, staff were enlisted to counsel and support anyone who became overwhelmed by the experience, and needed to leave. Journalism students attended the 'scene' as television and radio news teams to gain experience of reporting major incidents and conducting press conferences. Media and audio technology students recorded sound and footage of the day, to be used to develop reusable learning objects. SFRS and Scottish Ambulance Service (SAS) personnel were put under scrutiny two weeks later by law students who conducted the post-event legal inquiry.
**Findings:** As with every simulation, the success of this exercise was in the planning. From the outset, an interprofessional approach was taken, to ensure the learning objectives of all partners were defined and met. The success of this exercise was founded on the sharing of real-life experiences of the interprofessional team, which enabled the creation of an authentic and safe immersive experience. The opportunity to experience exposure to life changing situations, dealing with bereavement in tragic circumstances, teamwork, and addressing ethical and legal professional issues featured highly in student satisfaction. Learning together was not unique to the students. Experienced professionals reported finding value in developing their skills when under pressure from enthusiastic journalists and giving evidence in a legal setting.
**Conclusion:** With careful planning and a team approach, large scale immersive interprofessional simulation is possible. This enhances the student experience while preparing them for the real world and facilitates cross discipline learning from both a student and faculty perspective. Further research is required to measure the long-term impact of such exercises and how these can build resilience in the future workforce.

### REFERENCE

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## HUMAN FACTORS TRAINING: IS MEDICAL SIMULATION BEHIND THE CURVE?

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**Background:** Human factors training is the 'focus on optimising human performance through better understanding the behaviour of individuals and their interactions' [1]. This is essential within healthcare to improve clinical efficiency and safety. Aviation have long been industry leaders in delivering human factors training with mandated training [2]. Since 2010, emphasis on human factors within the NHS has increased [1] and is often incorporated into clinical simulation training [3], however there remains wide variation in the accessibility, quality, and understanding around human factors. We therefore sought to evaluate the delivery of our human factors teaching within undergraduate medical simulation in our district general hospital.
**Methods:** A pre- and post-educational intervention questionnaire was collected from 50 undergraduate medical students following a simulation teaching day. Students were asked to rate on a scale of 1–5 (1 least- 5 most confident) various domains including their understanding of human factors. A questionnaire was collected from the simulation facilitators (10 junior doctors). Facilitators were asked whether they had received any formal training in human factors, as well as how confident they felt in delivering teaching within various domains, including human factors, on a scale of 1–5. A further white spaced questionnaire was completed detailing their understanding of human factors.
**Results:** None of the 10 facilitators had formal human factors training and 50% rated their confidence level ≤ 3 when talking about human factors during the debriefing. However 80% rated 4/5 when discussing clinical skills or knowledge. This is reflected in only 50% of students rating a 5 in applying human factors following the simulation course whilst 78% rated a 5 in application of clinical skills/knowledge. Our white spaced questionnaire found a wide discrepancy in facilitators understanding of what human factors were and how to incorporate this into simulation, with the majority placing a heavy bias on non-technical skills.
**Conclusion:** There was a lack of awareness of what human factors encompass within our facilitators, likely stemming from a lack of formal training. This in turn resulted in medical students being predominantly taught non-technical skills. As our facilitators come from staff from all areas of the hospital, therefore we propose a human factors module be made available to all hospital staff, as an innovative addition to our hospitals e-Learning platform. This will be mandatory for all future simulation faculty and we hope the ease of access will increase the number of faculty trained in human factors.

### REFERENCES

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