Background Simulation is now seen as integral to the patient safety movement. At our Trust, the simulation team sit on the patient safety committee to identify situations whereby simulation may be a suitable response to error. A recent serious incident (SI) at the hospital identified a lack of competence and confidence amongst the acute adult on call physiotherapy team in managing children and adolescents admitted with respiratory disease. There is no dedicated paediatric respiratory physiotherapist at the Trust despite children with increased complexity now being deemed suitable for admission to the short stay children’s unit.

Project description After engagement with all relevant stakeholders, a one day simulation course covering the five most common and daunting respiratory conditions in children was devised including bronchiolitis, pneumonia in the well neonate, post-op atelectasis, respiratory distress in the context of cerebral palsy and pneumonia in the child with complex needs. These simulations were complemented with lectures and skills sessions on non-invasive ventilation. Faculty were drawn from the hospital and community physiotherapy team, the paediatric department and simulation faculty.

A workbook and quiz were completed prior to the course. Assessment was via a knowledge and skills questionnaire that had extrapolated items from the association of charted physiotherapists in respiratory care which has been proven as a valid tool for measuring competence. There was an added self-efficacy score measuring confidence and readiness in situations that could be encountered on call. The knowledge and skill items were rated from 1–5 and with an aim that participants would achieve a score of 3 or more which equals ‘practical experience and ability to work alone.’

Results 80% of participants passed the quiz pre course. Participant’s scores improved in all areas as measured by the pre and post knowledge and skills questionnaire with the exception of risk assessment. Participants were above the minimum score of 3 in all areas except for risk assessment also. Self-efficacy scores measuring confidence also improved across all parameters between the pre and post course assessment.

Conclusions Changes regarding teaching on risk assessment (e.g.: risk of aspiration with some therapies) needs to be incorporated into subsequent courses. The course continues to be rolled out to all physiotherapists participating in the acute on call rota and thus far 21 physiotherapists have completed the training. Future directions include extending the training to paediatric nursing and medical staff at the trust.
SC15  MCA/DOLS – SIMULATION AN ALTERNATIVE TO CLASSROOM?

Emma Williams*, Lisa Toft*, Sarah Thompson, Carole Moss, Paula Reynolds. Portsmouth Hospitals NHS Trust, Portsmouth, UK

10.1136/bmjstel-2019-aspihconf.48

Background The TEAMS simulation centre was approached in September 2018 to assist with MCA/DOLS training after the CQC inspectors questioned MCA/DOLS when CQC inspectors questioned staff. It was then that MCA and DOLS simulation was introduced in September 2018 to compliment the delivery method to improve MCA/DOLS.

MCA/DOLS when CQC inspectors questioned staff. It was then that MCA and DOLS simulation was introduced in September 2018 to compliment the delivery method to improve MCA/DOLS. Additional training sessions were provided and pre and post confidence questionnaires were provided to assess whether the candidates felt more confident after the simulation.

Summary of results Successful evacuations were achieved in scenario 1 and 2: 38 minutes and 37 minutes respectively. Table 1 outlines the human factors and system errors identified with recommendations for prevention.

Discussion, conclusions and recommendations Over a period of 8 months and 141 members of staff attending the simulation sessions the pre and post confidence questionnaires showed a 100% raise in confidence post simulation.

This is an Ongoing project to see whether the simulation changes practice in the workplace and if possible remove section 29a from CQC in the future.

REFERENCES


SC16 USE OF SIMULATION TO IMPROVE TEAM PREPAREDNESS FOR VERTICAL EVACUATION OF A CRITICAL CARE PATIENT DURING LIFT FAILURE

Hannah Davis*, Clinton Jones, Aintree University Hospital NHS Trust, Liverpool, UK

10.1136/bmjstel-2019-aspihconf.49

Project description Many hospitals have clinical areas accessible by lifts: in the event of fire or lift failure evacuation via stairs becomes necessary. Management of critical care patients during a lift failure offers challenges associated with a requirement for continuous monitoring, resuscitation and organ support using specialist equipment. Reviews of mass patient evacuations highlight the benefits of frequent simulation and involvement of external organisations on their success. Aintree University Hospital has developed a standard operating procedure (SOP) for the vertical transfer of critical care patients in the event of lift failure. Through an in-situ simulation exercise the aim was to test effectiveness of the new SOP and assess for latent errors in addition to offering a collaborative training opportunity for the hospital medical emergency team (MET) and external support agencies. Two simulations took place in locations vulnerable to lift failure. The MET were required to stabilise an unwell simulator patient and perform a vertical evacuation utilising the SOP. In each simulation an external emergency retrieval team assisted: North West Ambulance Service (NWAS) in scenario 1 and Liverpool Tactical Response Unit (TRU) in scenario 2. A debrief followed and participants provided feedback on perceived challenges.

Discussion, conclusions and recommendations This project demonstrates safe resuscitation and efficient vertical evacuation of critical care patients is achievable, the SOP triggers the appropriate actions and recruitment of external support. However, the major barrier to its use is the lack of awareness amongst staff of its existence. This exercise revealed latent errors relating to equipment, staff training and our SOP was insufficient to ensure safe practice.

Abstract SC16 Table 1 Factors identified and recommendations

<table>
<thead>
<tr>
<th>Factor identified</th>
<th>Recommendation</th>
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<tbody>
<tr>
<td>Human factor</td>
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<tr>
<td>Loss of situational awareness:</td>
<td></td>
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<tr>
<td>Delayed identification of lift failure resulting in delayed request for external support.</td>
<td>Frequent simulation training.</td>
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<td>System error</td>
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<tr>
<td>Staff not trained for manual handling of patient for vertical evacuation.</td>
<td>Targeted staff training.</td>
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<tr>
<td>Inadequate staff awareness of SOP.</td>
<td>Adjust SOP: only high priority equipment to be mobilised whilst resource limited for staff.</td>
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<tr>
<td>Physical demand of ascending stairs with equipment.</td>
<td>Cautious admission of bariatric patients to vulnerable wards.</td>
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<tr>
<td>Bariatric equipment not available.</td>
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</tbody>
</table>

REFERENCES


2. Triola et al. (2006) showed that live actors were a valid comparable model to high fidelity manikins. Gillett (2008) agrees showing that live actors are equivalent to using manikins during simulation exercises but that both have limitations, advantages and disadvantages. We provided 2 hour sessions, four scenarios were provided using live actor and used experiential learning with detailed debrief using specific learning outcomes.

Summary of educational programme/project The Simulation scenario 1 and 2: 38 minutes and 37 minutes respectively. Successful evacuations were achieved in scenario 1 and 2: 38 minutes and 37 minutes respectively.

Table 1 outlines the human factors and system errors identified with recommendations for prevention.

Discussion, conclusions and recommendations Over a period of 8 months and 141 members of staff attending the simulation sessions the pre and post confidence questionnaires showed a 100% raise in confidence post simulation. This is an Ongoing project to see whether the simulation changes practice in the workplace and if possible remove section 29a from CQC in the future.