Can you PACE yourself?

The power of language to flatten hierarchy and empower multi-disciplinary healthcare teams in simulated critical scenarios

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Background

Potentially harmful mistakes in healthcare are often the consequence of poor communication between members of a team.[1] Reasons for this communication breakdown are multi-factorial, but within healthcare a hierarchy, whether perceived or real can contribute to a reluctance to challenge decision making.[2] In response to a serious untoward incident, a programme of in-situ simulation training sessions was developed to replicate a variety of oncological emergencies. Sessions were delivered to multi-disciplinary groups, with a focus on non-technical skills and human factors.

Hypothesis

We predicted that participants would have an increase in confidence to challenge decision making where necessary, and an increased knowledge in relevant trust protocols post the simulation session and debrief.

Initial research questions:

How knowledgeable do you feel you are about Trust algorithms/protocols/guidance?

How confident do you feel challenging decision making of colleagues in complex clinical scenarios?

Method

A multi-disciplinary group works together in a scripted high fidelity simulation held in situ on an acute oncology ward. Multiple staff groups are represented, including junior doctors, RN's, HCA's, Student nurses, and radiographers. The simulation mimics a typical oncological emergency, for example neutropenic sepsis. Participants work together to manage the emergency. Human factors challenges and interruptions are incorporated into the scenario to increase the realism, and observe non-technical skills and dynamics within the team. Participants are introduced to the PACE algorithm (see fig 1) to aid them in communicating when faced with a steep hierarchical gradient. Participants take part in a structured debrief following the scenario.

Participant Feedback on the sessions
'Excellent chance to take a step back and think about what we do.'
'Training as a multi professional team was very useful.'
'Training was very well organised, informative, and fun!'
'I have a greater awareness of distractions and how they have the potential to impact on the safety of critical situations.'

Fig 1: PACE acronym

Probe—Polite enquiry (e.g. Do you think this could be Sepsis?)

Alert—Express concern (e.g. I am worried this patient could have sepsis and is deteriorating)

Challenge—State numbers or behaviour (e.g. This patient's respiratory rate is 28, she is significantly deteriorating, we need to escalate her care)

Emergency—Use trigger words (e.g. Stop! Her respiratory rate is 28 and she is rapidly deteriorating. **You must** escalate her care or I will)
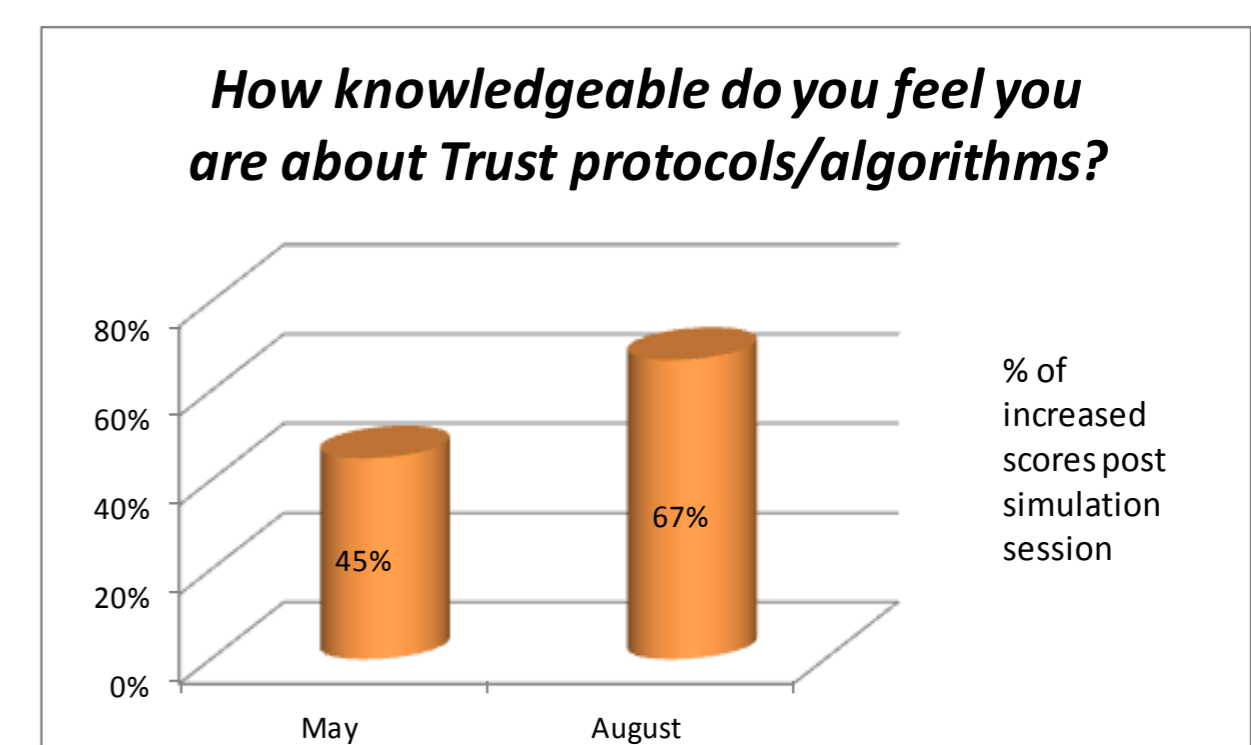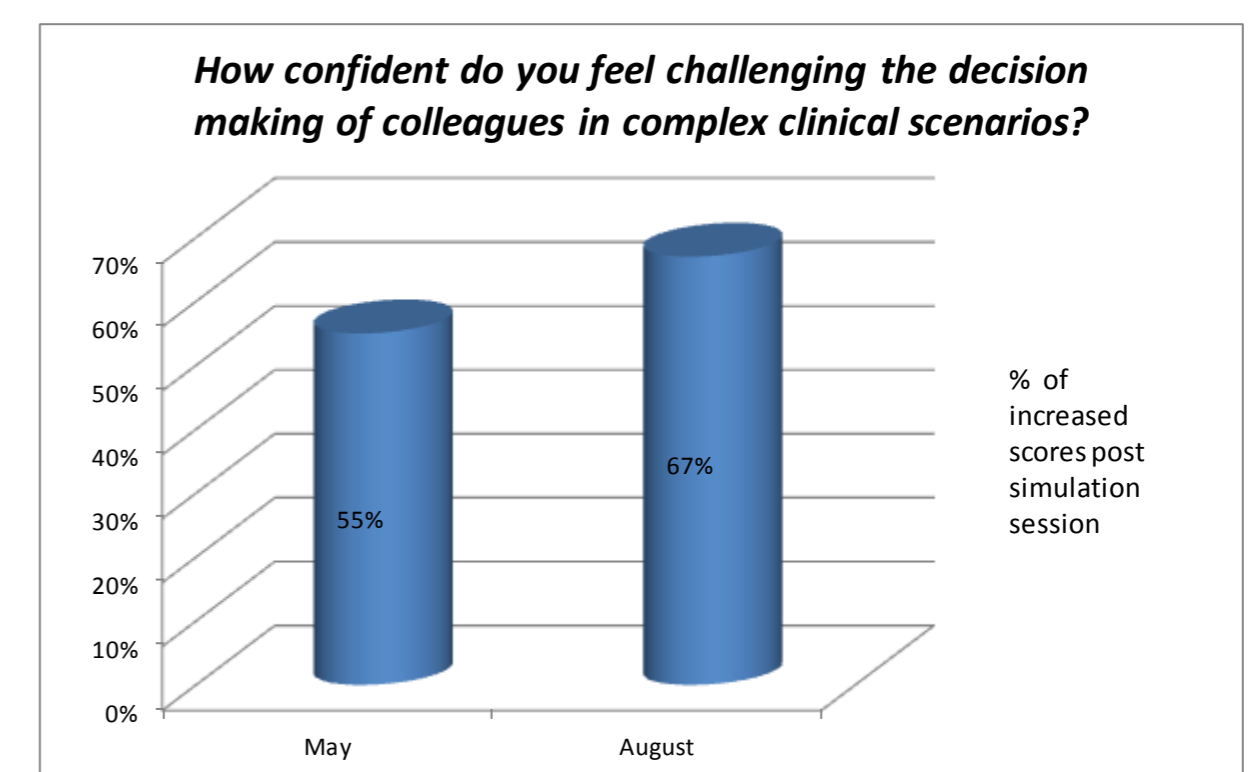
Results

An attitudes questionnaire based on Kirkpatrick's model was used to collect data. Participants completed a questionnaire pre and post the simulation. The results demonstrate both an increase in confidence to challenge decision making and an increase of knowledge of trust algorithms/protocols post vs. pre session (see graphs). The results displayed are representative of sessions held in May 2019 and August 2019. Additional research questions were asked regarding the value of in-situ simulation in general, 100% of participants felt that it improved team performance and communication.

What points will you take away from this session and use in practice?

'Out-Loud Thinking Concept'

'Assertive Communication/ PACE'

'Escalate Early'

How confident do you feel challenging the decision making of colleagues in complex clinical scenarios?

	May	August
% of increased scores post simulation session	55%	67%

How knowledgeable do you feel you are about Trust protocols/algorithms?

	May	August
% of increased scores post simulation session	45%	67%

Conclusions

In-situ multi disciplinary simulation training allows an ideal opportunity for all oncology team members to practice technical and non-technical skills in a safe, realistic environment. The increase in both confidence to challenge and knowledge of Trust protocols/algorithms represents a positive start to this ongoing research. The sessions are repeated quarterly and are adapted to cover a range of oncology topics.

In-situ multi disciplinary simulation training is an easily accessible and feasible method of providing a learning environment to practice team working and non-technical skills.

References

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