

A descriptive evaluation of clinician's gaze behaviours during simulated paediatric emergencies

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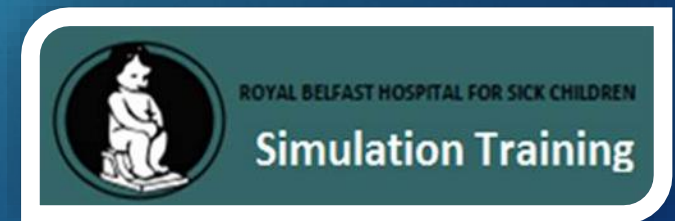
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Background/Aims



AUTISM

To define the gaze behaviour, standing positions and clinical performance of clinicians during a simulated paediatric emergency

Methods

- Observational study
- BHSCT governance approval
- Convenience sample
- Participants all undertook a standard 6 minute scenario
- Participants blinded
- Structured debrief



Eye gaze

- SMI ETG®
- 4 key areas of interest - airway, algorithm, chest and defib

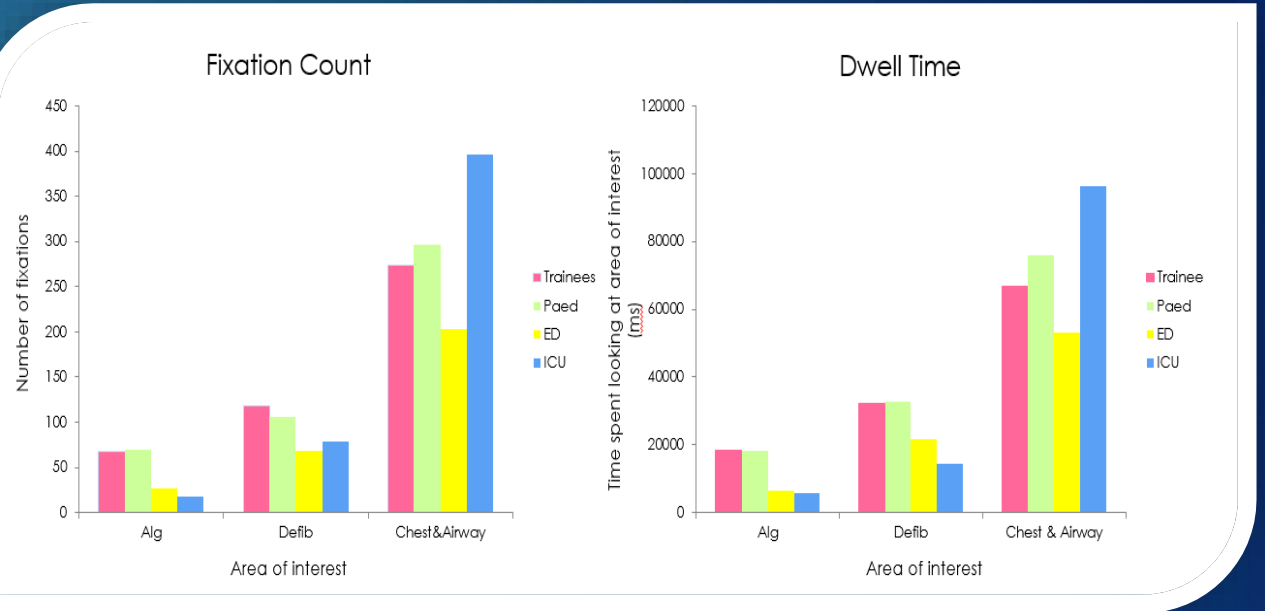
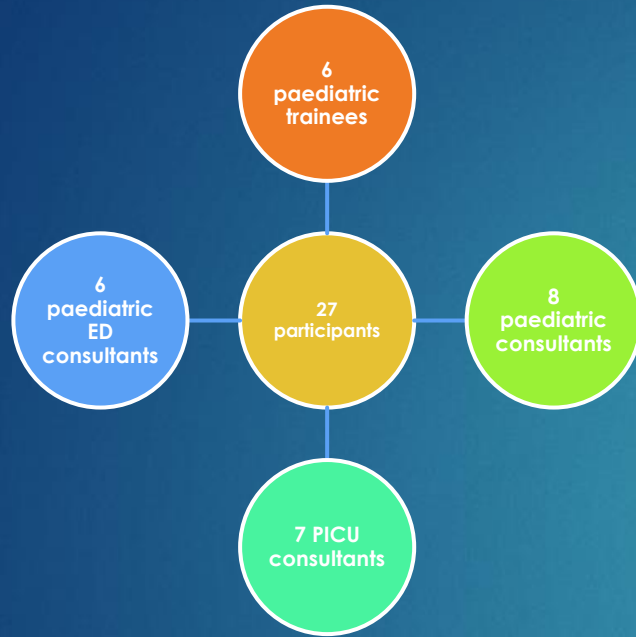
Standing positions

- Momentary time sampling

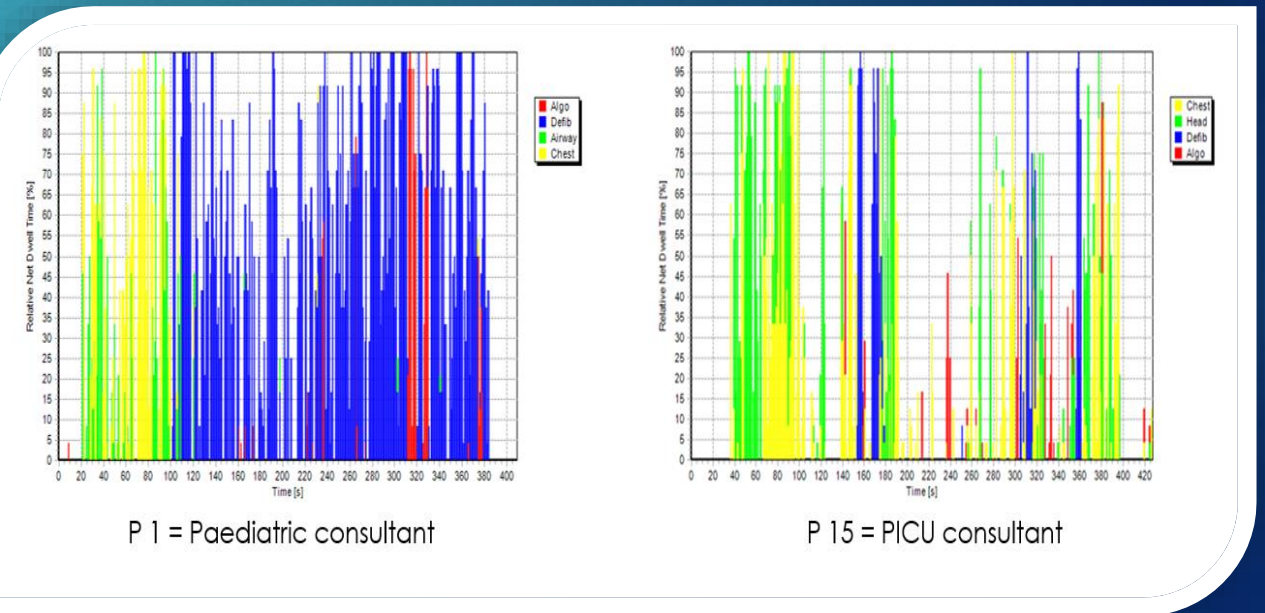
Time to key interventions

- Review of video recordings

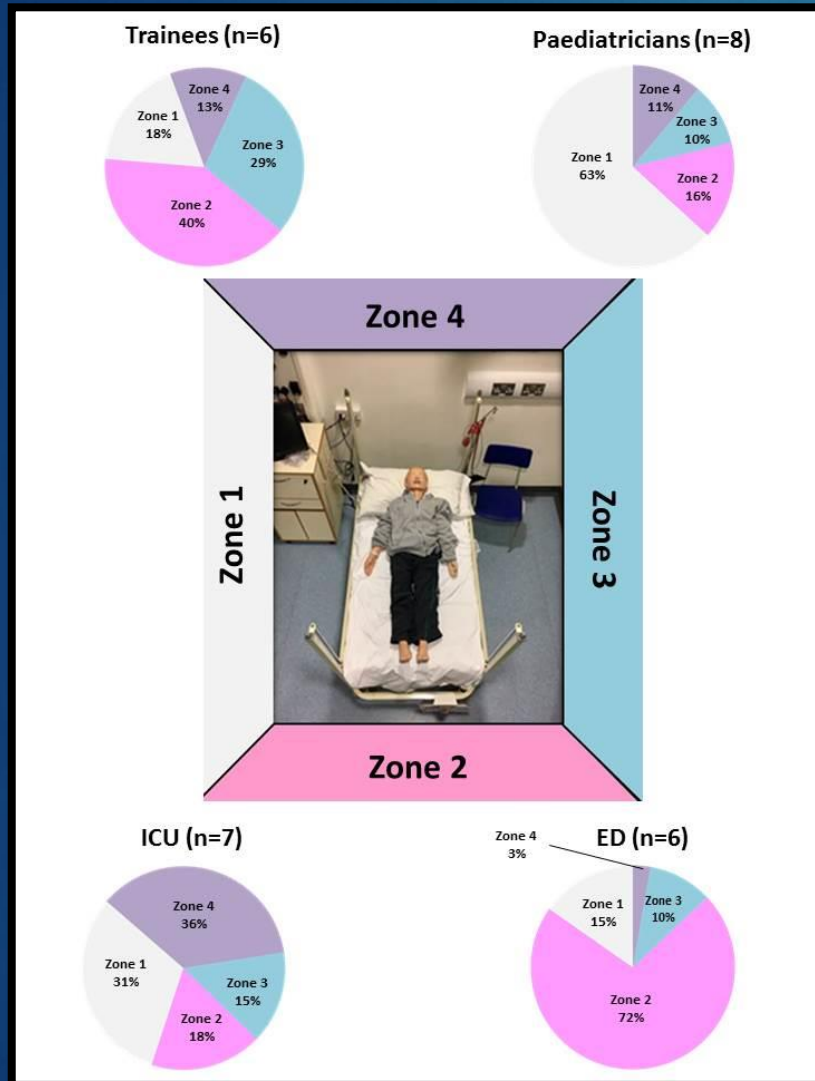
Results



	Median time in seconds		
	Bag and mask ventilation	Chest compressions	1 st Shock
Trainees	29.5	47	129
Paediatricians	34	60.5	142
PEM	34.5	43.5	123.5
PICU	27	32	105



Results



Conclusions

- Our study is the first to describe the gaze behaviour of clinicians in a simulated emergency.
- PICU consultants were fastest to all key clinical interventions and their gaze behaviour is very similar to that observed in experienced pilots.
- Although potentially perceived as experts, consultant paediatricians performed worst and had a similar gaze pattern to true novices [trainees].
- Their tendency to 'perceptual narrowing' in situations of high cognitive load has been described in novice drivers and increases the risk of missing key visual cues.
- Further research is needed to develop and evaluate how this could be used as an educational tool to teach novices.
- This may improve training and ultimately enhance the quality of care offered to patients in the resuscitation setting.