Background: Health professionals who have experienced ill-health appear to demonstrate greater empathy towards their patients. Simulation can afford learners opportunities to experience aspects of illness but to date there has been no overarching review of the extent of this practice or the impact on empathic skills. Our aim was to determine from the evidence – what is known about simulation-based learning methods of creating illness experiences for health professions and the impact on their empathic skills.

Methods: Arksey and O'Malley's methodological framework informed our scoping review of articles relevant to our research question. Three databases (Medline, Embase and Web of Science) were searched in November 2020 and a sample of 516 citations were exported to Covidence Systematic Review Software© for screening. Following review and application of our exclusion criteria, 79 articles were selected in February 2021 to be included in this review.

Findings: Of the 79 articles, 52 [66%] originated from the USA, 37 (47%) were qualitative based and 17 (28%) used a mixed-methods model. 77 (97%) of the articles explored the impact on learners with the majority (85%) reporting positive impact and range of emotions evoked. For instance, loss of independence throughout paralysis or impairment simulations left the majority of participants feeling vulnerable – 'somebody they did not want to be, something negative'. Often learners gained a greater sense of empathy towards their patients, generating a range of measures that they could translate into practice to demonstrate a more holistic approach (providing more time, conveying reduced amounts of information). However, some studies observed more negative effects and additional debriefing was required post-simulation. For example, auditory hallucination studies reported a decrease in intention to help or interact with individuals with a mental illness, they did not engender goodwill or a desire to have contact, but rather facilitated social distance and negative emotions, as well as an increased willingness to apply forced treatment. A sense of suspicion and less positive attitudes towards older adults was likewise observed in some simulations of old age. Learners were noted to internalize perceived experiences of illness and to critically reflect on their empathic role as healthcare providers.

Implications for practice: A diverse range of simulation methods and techniques, evoking an emotional and embodied experience, appear to have a positive impact on empathy and could be argued as offering a complementary approach in healthcare education; however, the long-term impact remains largely unknown.

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| 76 | **BENEFITS AND CHALLENGES OF INTER-PROFESSIONAL EDUCATION WITHIN THE EMERGENCY DEPARTMENT *IN SITU* SIMULATION** |

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Background: A comprehensive literature review was performed to critically evaluate the benefits and challenges of inter-professional education (IPE) in the Emergency Department (ED) and within *in situ* simulation.

Method: A literature review was carried out for manuscripts within my institution's high-quality online library, as part of a post-graduate assignment. Search terms included keywords: 'interprofessional education', 'interprofessional teams', 'simulation', 'emergency medicine', and 'healthcare'. A total of 23 peer-reviewed manuscripts were identified spanning a publication range of 22 years (1998 to 2020). Analysis of the literature resulted in the identification of 7 subject headings as most relevant to IPE. These subject headings were 'patient safety', 'patient flow', 'learning outcomes', 'professional identities', 'organization', 'technology enhanced learning' and 'faculty'.

Findings: EDs are demanding [1], resource limited [2] and inter-professional (IP) areas, and as a result, anything leading to a reduction in errors and improvement of team working must be welcomed. IPE has been shown to improve both of these key factors; however, IPE within a busy ED is fraught with challenges. These include shift patterns, clinician 'buy-in', and not least physical space in a social distancing world. Faculty must consider shared learning outcomes for all professions, which is recognized as being hard to achieve [3], ensuring that the professions are learning 'with, from and about' [4], to prevent the step over to multi-professional education. To do this, we must understand each other's professional identities to improve our team working and by having IP faculty we can represent these identities and use a 'co-tutoring' approach [ref. 3, p.89].

Implications for practice: IPE occurs frequently in *in situ* simulation, but how can each profession feel like they have equal learning outcomes when the faculty is uniprofessional? By having inter-professional faculty some of the challenges of delivering effective IPE, for all, are easier to overcome. *In situ* simulation should be inherently IPE but with faculty often uniprofessional we may be creating our own barriers to true inclusivity. There is no doubt that IPE simulation is beneficial when delivered well; however, IP facilitation is currently an area underexplored in the literature.

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| 132 | **ASSESSMENT TOOLS TO MEASURE CLINICAL REASONING WHILE ATTENDING SIMULATION-BASED COURSES** |

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Background: Clinical reasoning is interconnected with decision-making which is a critical element to ensure patient safety [1]. To avoid practice mistakes, healthcare

professionals should be competent with effective clinical reasoning skills. To develop effective clinical reasoning skills, healthcare professionals should get the chance to practise and be exposed to various experiences and levels of patient complexities. Simulation can immerse learners in scenarios that mimic clinical situations, simultaneously mitigating safety risks and increasing standardization in healthcare education [2]. Through simulation, learners can get the chance to practise clinical reasoning with focussed learning opportunities [3]. Several assessment tools have been used to measure clinical reasoning while attending simulation-based activities. However, we would like to explore the most valid and reliable tools to assess clinical reasoning while attending simulation, in addition to finding out whether these tools have considered the seniority and competency levels of their users.

Method: A scoping review was undertaken to answer the questions: What are the best available valid and reliable tools to evaluate clinical reasoning while attending simulation-based activities? Do we have valid and reliable clinical reasoning assessment tools for simulation that measure clinical reasoning considering different seniority and competency levels? We searched Medline, Scopus, Education Research Complete, and Google Scholar to identify relevant recent primary research conducted on this topic from 2000 onwards. The search included MeSH topics of: 'Clinical reasoning', 'Simulation-based courses' and 'Clinical Reasoning tools'. The inclusion criteria were primary studies that described the use of tools measuring clinical reasoning while attending simulation-based courses. Two independent researchers agreed on the inclusion of the identified papers for full-text review. This review followed the review guidelines of Joanne Briggs institute.

Findings: There are valid and reliable tools to evaluate clinical reasoning while attending simulation which is Clinical Reasoning Evaluation Simulation Tool CREST [1]; Lasater Clinical Judgment Rubric LCJR [4]; Creighton Competency Evaluation Instrument Creighton C-SEI- Tool [5]. However, the validity and reliability of these tools were tested on undergraduate student nurses, and there was no consideration for different seniority and competence levels, and applicability to other healthcare professions.

Implications for practice: There is an adequate number of tools to measure clinical reasoning while attending simulation. However, there is a significant basis to test the reliability and validity of these tools against different competence and seniority levels, and applicability to other healthcare professions.

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Background: Paediatrics requires diverse, adaptable, age and developmentally appropriate communication and clinical skills which HCPs can find challenging, negatively impacting paediatric care. The involvement of simulated patients (SPs) could be used to bridge this gap and bring patient perspectives. To create authentic, high-fidelity paediatric simulations it makes sense that young people should have a role. As a paediatric registrar in a district general hospital, I considered how to involve adolescent SPs in teaching by performing a literature review.

Method: On 2 February 2021, an advanced title and abstract search on PubMed: 'paediatric'/'children'/'adolescent' AND 'simulated patient'/'simulated patients'/'standardized patient'/'standardized patients'. In total, 196 results returned which I filtered as per the inclusion and exclusion criteria (Table 1) leaving five articles.

Table 1: Inclusion/exclusion criteria

Inclusion criteria	Exclusion criteria
1. Real-time encounters with SPs -SPs 12–18 years old -Available in English	-SPs >18 years old -Parental SPs only -Adult playing child or young person -Not available in English

Findings

1. Recruitment: SPs were recruited from theatre groups [1], schools [2,3] or by word of mouth [4,5]. One group ran sessions at a local school which were included in the curriculum [2].
2. Training: some authors ran didactic teaching about conditions, rehearsals or video training [4]. A lack of training was found to be troublesome.
3. Scenarios: standards of best practice state that simulated patients should be involved in resource writing and evaluation. However, while one group personalized scenarios [5] no SPs collaborated in writing. One study felt that it was unkind to ask SPs to draw upon potentially negative personal experiences [1].
4. Feedback: honest feedback from SPs is central to optimizing learning which SPs found challenging. Training to feedback with 'I' statements or using 'the character' to feedback was useful [1,5]. Some studies paired SPs with parents for feedback [1].
5. Positive impact: SPs felt the experience was positive and would be involved again. Positive impacts include: increased trust in HCPs [1,2], increased confidence [1], learning about illnesses and reduced stigma around mental illness [2,4]. I also note the future benefits of having well-trained and competent HCPs who communicate effectively.
6. Negative impact: exhaustion, boredom and potential for exploitation (missed schooling) [5]. Mental health roles fostered anxiety and depressive symptoms which were underestimated by the SPs themselves [4]. Some parents were debriefing their own children in the absence of a formal debrief [1].
7. Student learning: real children challenged students' interpersonal skills and rendered encounters realistic.