development. There is need for development of training methods which minimise impact on clinical service delivery.

Therefore, our aim was to develop a simulation training model for Emergency Department (ED) JDs which would a) have minimal impact upon ED service provision and b) deliver tailored learning objectives according to the participants' level of training.

Method and Design The "Simulation and Personalised Education in the Emergency Department" (SPEED) model was developed. On SPEED days, JDs and advanced clinical practitioners (ACPs) who were undertaking clinical duties in ED were invited on an individual basis to participate in a twenty-minute clinical simulation. Upon completion, the participant underwent a ten-minute debrief to reinforce predetermined learning objectives before returning to their clinical duties. Pre- and post-session questionnaires were conducted to assess acquisition of learning objectives. Departmental data on time to be seen by an ED clinician were collected retrospectively for SPEED days and comparable non-SPEED days.

Results and Conclusion A total of 7 SPEED days were conducted over 6 months between September 2022 and March 2023. 65 JDs and ACPs participated across the seven days. On asking about the usefulness of the SPEED session for day-to-day practice, 41 participants responded "strongly agree" and 18 participants responded "agree". 6 of the 7 SPEED days demonstrated a positive mean difference in post-session questionnaire score when compared to pre-test questionnaire. There was no statistically significant difference in time to see clinician between SPEED days and comparable non-SPEED days.

The SPEED model demonstrates acquisition of learning objectives which are relevant to day-to-day practice. There is no evidence that delivery of this training method significantly affects waiting times. Adoption of this training strategy may improve training opportunities for other ED clinicians.

2191 DIAGNOSING DIGITAL PATHOLOGIES AND PREVENTING DIGITAL DEATHS: CLINICAL SIMULATION TRAINING IN MEDICAL EMERGENCIES RELATING TO TECHNOLOGY

[1]Isabel Straw, [2]Joanna Dobbin, [2]Demelza Luna-Reaver, [2]Leonie Tanczer. [1]*Homerton University Hospital*; [2]*University College London*

10.1136/emj-2023-RCEM.47

Aims and Objectives Emergency physicians are expected to know a little about a lot - to be the "Jack of all trades, and master of resuscitation" (Cunningham, 2021). From major trauma to urinary tract infections, practitioners need a breadth of knowledge that allows them to respond effectively to diverse crises occurring in different specialties. In our increasingly digital age this knowledge base needs to encompass the novel digital pathologies that have begun affecting patients, however at present clinician receive little training on this topic. Termed 'biotechnological syndromes', these illnesses occur at the intersection of human health and technology, and range from malfunctioning cochlear implants to cases of 'medjacking' in domestic abuse. Our research investigated the challenges that digital pathologies present in the emergency setting and defined clear recommendations for improving patient care.

Method and Design Medical professionals were recruited from three NHS sites to participate in a clinical simulation study (n=14). Simulations consisted of digital emergencies drawn from the case report literature, including illnesses from hardware issues (faults in pacemakers), software malfunctions (errors in deep brain stimulators), and technology-facilitated abuse (spyware in interpersonal violence). Qualitative and quantitative feedback was collected from participants, and extensive notes were taken by two scribes during debrief sessions. Ethics approval was obtained from University College London (UCL).

Results and Conclusion Participants struggled to identify the technology as the source of pathology and were consequently limited in the care they could provide. Challenges in management included (i) a lack of diagnostic awareness, (ii) unfamiliarity with devices, (iii) limited understanding in digital mechanisms of disease and (iv) absent treatment protocols and escalation pathways. In conclusion, despite the proliferation of digital technologies in the healthcare domain, clinicians are not trained to treat patients when these tools go wrong. Medical training urgently needs to be updated to ensure patients affected by adverse digital health events receive effective care.

2082 INITIAL FINDINGS FROM A PUBLIC PARTICIPATION WORKSHOP ON THE SONIC ENVIRONMENT IN THE EMERGENCY DEPARTMENT

[1]Joanna Sutton-Klein, [2]Alex De Little, [1]Richard Body. [1]*University of Manchester*; [2]*University of Leeds*

10.1136/emj-2023-RCEM.48

Aims and Objectives The term 'sonic environment' describes the overall ensemble of sounds within spaces. Poor sonic environments in hospitals have been found to 'impede the recovery process' for patients and reduce staff performance. Sonic environments are often overlooked in hospital design, leading to spaces which are not supportive for care.

We propose using a qualitative approach called 'deep listening' to explore the sonic environment of emergency departments. This is an embodied practice of listening that includes listening to the sonic environment as a whole, focusing on specific sounds, and reflexive elements of journaling and discussion.

We organised a public participation workshop to explore perspectives on the sonic environment of an emergency department as well as their perceptions and experiences of the deep listening methodology.

Method and Design We recruited six participants (5 female, 1 male) who had pre-existing interests in sonic environments or healthcare. We introduced them to deep listening through a series of listening exercises.

Participants then spent 30 minutes in the emergency department practicing deep listening. They were seated in pairs in the waiting rooms for minor injuries, ambulatory patients, and pre-triage walk-in patients.

They then took part in an hour-long focus group. Findings were summarised using thematic analysis.

Results and Conclusion Participants identified a range of sounds including mechanical hums, monitor alarms and the sounds of people moving. The sounds evoked varying reactions among participants, including anxiety when the source or significance of the sound was unknown.

Overheard speech played a prominent role in the sonic environment. Participants reported that they could pick up the emotions within the speech, even if they couldn't comprehend the words.

In conclusion, participants had positive experiences of deep listening and felt that the sonic environment of emergency departments is an important area for future research and intervention with the aim of improving patient experience, patient safety and staff wellbeing.

2108 METOCLOPRAMIDE FOR ANALGESIA IN RENAL COLIC – A SYSTEMATIC REVIEW

[1]Andrew Tabner, [1]Graham Johnson, [1]Nicholas Tilbury, [2]Matthew Reed, [1]Suzanne Toft, [1]Apostolos Fakis, [3]Adithan Ganesh, [3]Nikhil Ponna, [3]Lucy Hobbs. *[1]University Hospitals of Derby and Burton NHS Foundation Trust; [2]Edinburgh Royal Infirmary; [3]University of Nottingham*

10.1136/emj-2023-RCEM.49

Aims and Objectives Renal colic is often extremely painful, and existing analgesic regimes frequently provide insufficient relief. There is biological plausibility that metoclopramide, a prokinetic antiemetic with activity at multiple receptor types, may be a useful treatment for renal colic pain. This review identifies and evaluates the relevant evidence concerning its use for this indication.

Objective To systematically evaluate the existing evidence for whether metoclopramide is an effective analgesic in the management of adults with renal colic.

Method and Design Evidence Acquisition: The following databases were searched in November 2022: CENTRAL; MEDLINE; EMBASE; AMED; MIDIRS; HMIC; Global Health Archive on Trial; Google Scholar; PROSPERO. Reference lists of eligible articles were hand-searched.

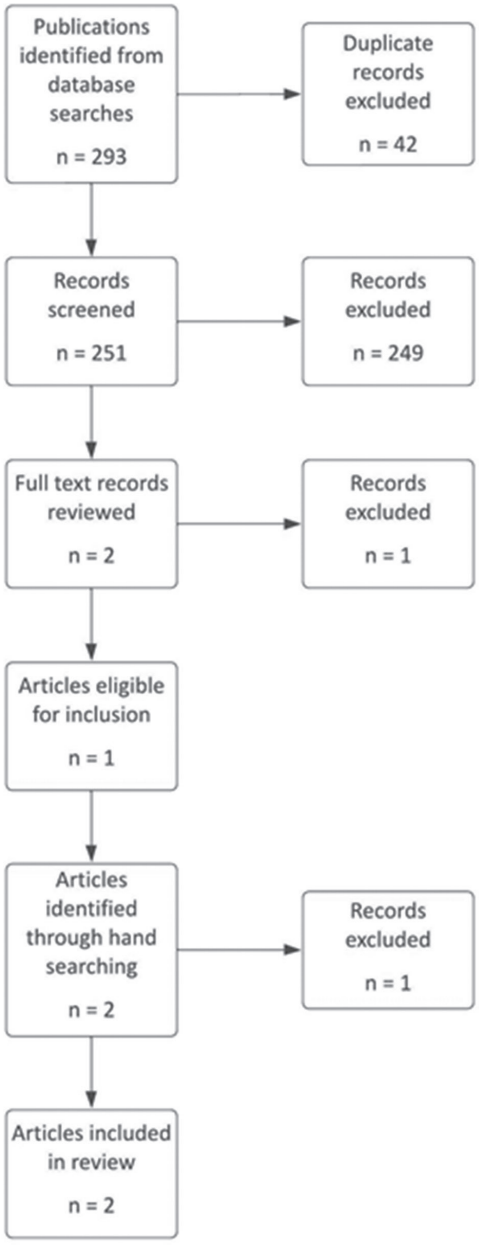
Study eligibility: Randomised, quasi-randomised or baseline-matched case-control clinical trials evaluating metoclopramide for analgesia in patients with renal colic, reporting pain as an outcome assessed using any recognised measure of pain severity.

Review process: Titles and abstracts were screened by two authors independently; disagreement was resolved by discussion or by adjudication by a third author. Full text review was performed by two authors independently, with disagreements resolved as above.

Assessment of bias: The Cochrane Collaboration Risk of Bias Tool v2.0 was used to assess bias.

Results and Conclusion Evidence Synthesis: Two studies were included. Heterogeneity of primary outcome measurement and comparators rendered meta-analysis inappropriate; a narrative review is presented. Both studies showed evidence of analgesic effect; each demonstrated equivalence with alternative analgesic options (tenoxicam and Spasmofen), the latter being a combination analgesic no longer in routine use in clinical practice.

Conclusions There is some evidence that metoclopramide may be an effective analgesic in the management of renal colic, with the highest quality study demonstrating analgesic properties similar to an intravenous non-steroidal anti-inflammatory medication. Existing evidence is insufficient to recommend adoption of metoclopramide within the analgesic regime for renal colic as part of standard care.



Abstract 2108 Figure 1 A PRISMA flow diagram of evidence acquisition in a systematic review of the analgesic properties of metoclopramide for the pain of renal colic

2177 A QUALITATIVE EVALUATION OF PATIENT PERSPECTIVES ON CROWDING IN THE EMERGENCY DEPARTMENT

James van Oppen, Alex Craston, Mariam Omar, Harriet Scott-Murfitt. *University of Leicester*

10.1136/emj-2023-RCEM.50

Aims and Objectives Crowding is the most pressing issue currently faced by UK emergency departments (ED). When departments are crowded then hospital admissions are delayed, and the risk of mortality is increased. Professionals working in crowded departments feel unable to provide high quality care and are predisposed to burnout. Awareness of the impact on