

and electronic records were checked to see if this imaging took place.

Results 246 children had a skeletal survey as part of a child protection investigation in our hospital. 41 of these were excluded as they were referred from another health board to tertiary services in the hospital and follow up notes could not be accessed. Of the remaining 205 children 170 (83%) received either a follow up skeletal survey or chest X-ray at 14 days. A new injury was identified in 28 (13.7%) of children who underwent recommended imaging as part of a child protection investigation. The initial skeletal survey identified a new injury in 23 (11.3%) children, a further 5 (2.4%) children had injury demonstrated on secondary imaging with negative first skeletal survey. Of the 170 children that underwent follow up imaging a new fracture was found in a total of 11 (6.5%) cases (5 where original skeletal survey was negative; 6 where original skeletal survey was positive).

Conclusion Adherence to local and national standards could be improved, with 35/205 (17%) of children not having had follow up radiological imaging. The positive results from skeletal survey (13.7%) and follow-up imaging (6.5%) suggests that these investigations have an important role in the assessment and identification of potential abuse.

G146

CAN A VIRTUAL REALITY COMMUNICATION SCENARIO BE USED TO TEACH GENERAL PRACTITIONERS AND TRAINEES HOW TO RECOGNISE AND MANAGE SAFEGUARDING ISSUES?

¹O Drewett, ²G Hann, ³S Delacroix, ⁴X Pan, ⁵CR Fertleman. ¹Medical School, University College London, London, UK; ²Paediatrics, North Middlesex University Hospital, London, UK; ³Laws, University College London, London, UK; ⁴Computing, Goldsmiths, University of London, London, UK; ⁵Paediatrics, Whittington Health, London, UK

10.1136/archdischild-2018-rcpch.142

Background Immersive reality has been demonstrated to be an exciting educational tool in clinical consultations. Research groups internationally continue to explore new uses for this technology.

Safeguarding is a challenging area of practice where we must listen to the child, and tackle difficult conversations with parents. As it is unethical to ask children to role play being abused, computer generated characters could have a key role in educating healthcare professionals on how to manage difficult scenarios.

Aim To assess the interaction between doctors and a vulnerable child in a virtual reality safeguarding scenario.

Methods All doctors at several local GP practices were offered inclusion in the study in early 2017. They were placed in an immersive virtual reality consultation where we tested their ability to pick up covert safeguarding cues within a consultation with an adult patient.

After the consultation, they typed up their notes electronically as they would in their day-to-day practice. We have analysed their videoed consultations with the child and used a team of experts to rank their notes on how well they managed the safeguarding concern.

Results We recruited 63 participants in total; 37 GPs and 26 trainees, and 73% identified the safeguarding element of the consultation.

Following the consultation only 14% of GPs identified asking the vulnerable child in the scenario about his relationship with his father. Negative responses ranged from comments such as 'No, I thought the 'agenda' item was the letters' to 'I could/should have asked him directly if everything was ok at home' to 'I wasn't sure that I should ask Tom questions without a parent present as he is only 6'.

Conclusion The fact that 73% of participants identified the safeguarding element shows that it was identifiable within the consultation and highlights the usefulness of immersive reality as a training tool.

However, it also demonstrates a need for further training to increase the recognition rate. The range of interactions with the child demonstrates that some GPs are clearly skilled at interacting with children and others less confident. Their videoed virtual reality consultations would be a useful safeguarding training tool.

G147

REVIEWING CHILDHOOD DEATHS VIA ELECTRONIC HEALTH RECORDS AND WIDER DATA LINKAGE

A McLaughlin, L Boyd, R Harris, J Reilly, A Rennie. *Specialist Children's Services, NHS Greater Glasgow and Clyde, Glasgow, UK*

10.1136/archdischild-2018-rcpch.143

Aims The Child Death Reviews Working Group Report (Scottish Government, 2014) recommended that a national review system is implemented across Scotland. NHS Scotland does not currently have one system that captures data of all children who have died. The aim of the present study is to review childhood deaths, within one health board in Scotland, through analysing data from Electronic Health Records (EHR) and wider sources.

Methods A mixed-methods case series analyses approach was adopted within a constant comparison framework. EMIS is an EHR system implemented within this board three years ago. It captures health data of all patients 0–5 years and patients 6 years and over referred to Specialist Children's Services. EMIS data of deceased patients (0–19 years old) within one Scottish health board, who died between July 2015 and September 2017, were analysed alongside data from wider sources including the Specialist Child Protection Service (SCPS).

Results Between July 2015 and September 2017, 156 children (m=87, f=69), aged between 0 and 19 years old were recorded as deceased within EMIS. 57.7% of the children died before their first birthday and 89.7% were known to at least one NHS service. None were known to the SCPS. Preliminary analyses suggest that an age × environment interaction exists, with the highest death rates observed in infants who resided within decile 1: postcode areas of highest multiple deprivation (SIMD, 2016).

Conclusions The study represents this health board's first step in establishing a systematic and robust analytical process to review child deaths via EHR and wider data linkage. The findings demonstrate the potential that this approach offers in building a comprehensive understanding of why a child has died, what risk factors were known and how this knowledge can better protect children in the future. The analyses also suggest that gene × environment vulnerabilities may exist and that particular age-groups require greater support to protect