- To understand parental concerns and obtain their opinion on visits to the Emergency Department- including the most stressful parts and suggestions for change.
- To affect change within the Emergency Department in order to improve patient and parent experience.

Methods Following ethical approval from the local Clinical Research Ethics Committee, parent questionnaires were distributed. Staff questionnaires will be distributed prior to educational sessions. These will be roughly 1 hour in length and included; Definition of Autism, understanding autism and children with complex needs, a parent discussing their experience and an open question session. Separate study sessions will be held for Paediatric and ED colleagues (doctors and nurses) to maximise attendance.

Parental questionnaires were posted to patients of children with moderate to severe autism; intellectual disability or complex needs. These patients were selected from the Community Neurodevelopmental Consultants patient cohort.

Results In total 315 parental questionnaires were distributed. At the time of writing this there have been 40 responses. The results thus far are demonstrating recurring areas which cause the most stress. These areas are: waiting times, small cramped waiting rooms and getting blood tests performed.

Staff will be surveyed and education sessions are planned for the next month.

Conclusion The Emergency Department is a stressful environment for everyone but this is particularly true for those with complex needs and autism. Simple measures can be instituted to improve patient and parental experience. We will truly endeavour to implement simple changes, such as educating staff further and a patient alert sticker, to improve the experience of these patients.

P270

Snakebites in Al- Baha District, Saudi Arabia (Epidemiology, Clinical Presentations, Management and Prevention)

Mahmoud Rashad*. *King Fahd Hospital, Al Baha, Saudi Arabia. Al Azher University, Cairo, Egypt*

10.1136/archdischild-2019-epa.620

Introduction and Aim of the Work

Exposure to a variety of venomous animals, including snakes and scorpions, represents an environmental health risk in Saudi Arabia during the last few years. High incidence rates have been reported in Al-Baha region.

The objective of this paper is to study the epidemiology, clinical presentations, management of snakebites among children in Al- Baha region, Saudi Arabia and to establish a prevention plan.

Patients and Methods Surveillance of all cases (up to 15 years old from both sexes) presented with snakebites during the period from May 2017 to May 2018. Data obtained for each case, included personal details, clinical presentations, details of the bite itself, laboratory findings and treatment lines used for every case. Envenomation was graded as 0, 1, 2 or 3 according to local, systematic and laboratory presentations.

Results Study population consisted of 83 cases with male to female ratio 2.2:1, Saudi to non Saudi ratio 2.4:1, a peak age

group was 10-< 15 years and more in rural areas (81.9%). The results showed that the peak incidence occurred outdoor (79.5%), more in lower limbs (83.1%), during summer (57.8%), at night (73.5%) and mainly due to bare feet (91.6%) and darkness (73.5%). Type or the snake could not be identified in 71.1% of cases, and *Echis coloratus* was commonest identified type (10.8%). Envenomation was graded as nil (0) in 15.7% of the cases (1) in 39.7% of the cases, moderate (2) in 33.7% of the cases and severe (3) in only 10.8% of the cases. No mortalities were reported.

Most cases (48.2%) presented > 4 hours after the bite, all were hospitalized. First aid treatment including wound cleansing was done in 95.2%, antitetanic serum was injected in all cases and dopamine was infused to 7.2% of the cases. Main specific treatment was the polyvalent snake antivenom which was infused as early as possible to cases graded as 2 and 3 (44.5%). Antibiotics were used in 86.7% of the cases. Fresh frozen plasma and/or platelets transfusion was given to in 20.5% of cases.

Conclusion Health education in PHCs and of school children was shown to be useful in the prevention of snakebite. It should include the importance of preventive measures such as wearing protective clothing while in the snake environment and not reaching blindly into areas where snakes may hide especially during summer months.

P271

How can we improve paediatric simulation training in a mixed ED?

Claire Connellan, Lisa Dann, Jennifer Jones, Peter Tormey*, Ethel Ryan. *University Hospital Galway, Galway, Ireland*

10.1136/archdischild-2019-epa.621

Introduction The high-risk, low-volume nature of paediatric emergencies can result in a lack of physician comfort and confidence in dealing with sick children.¹ Simulation training can help improve caregiver confidence and team communication and performance in paediatric emergencies.¹

Aims Weekly, multi-disciplinary simulation sessions are held in the ED in UCHG. We sought to identify the baseline experience and confidence levels of those attending and to identify areas whereby the sessions could be improved. We then re-surveyed participants after 15 simulation sessions to identify how useful they found the sessions and to identify means of further improvement.

Methods Surveys were distributed to staff attending the weekly simulation sessions before and after 15 simulation sessions.

Results 17 baseline and follow up surveys were returned.

The initial comfort level of respondents participating in simulations were: very uncomfortable (4), slightly uncomfortable (4), neither comfortable nor uncomfortable (6), comfortable (3), very comfortable (0). 10/17 respondents felt they learned more by participating in simulations and 7/17 felt that they learn more by observing. 15/17 found the scenarios 'helpful' or 'very helpful'. Suggestions to improve the sessions included: more consultant involvement (5), a registrar leading the scenario (4), longer, more complicated scenarios (6), involvement of more participants (8) and receiving the topic and study materials earlier in the week (7). We sought to implement these recommendations and then performed the follow up survey.

After 15 simulation sessions 8/17 participants found the sessions very helpful and 9/17 found them helpful. 6/17 'strongly agreed' and 10/17 'agreed' that the sessions improved their confidence in participating in simulations. 10/17 participants felt they learned more by observing the simulations. 17/17 participants found the sessions helpful and 15/17 felt they improved their confidence dealing with sick children. Feedback on improvements made to the sessions was variable and suggestions for further improvement were received.

Conclusions 100% of participants felt the sessions were helpful and 88% felt they improved their confidence dealing with sick children. Low-fidelity, in-situ simulation can improve caregiver confidence but it important to be aware of the various levels of experience within your department and to seek feedback and strive for constant improvement.

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P272 MANAGEMENT OF FINGERTIP INJURIES IN THE PAEDIATRIC EMERGENCY DEPARTMENT CLINIC- MORE THAN LOCAL ANAESTHESIA

Aileen Egan*, Deborah Cullen, Patrick Fitzpatrick. *Temple Street Children's University Hospital, Dublin, Ireland*

10.1136/archdischild-2019-epa.622

Trauma and injuries represent a significant portion of presentations to the Paediatric Emergency Department, with a major subset comprising hand and fingertip injuries. These require input from specialist hand surgeons. In co-ordinating this care pathway, the aim is to provide effective and definitive treatment in a manner that is straightforward for parents and least stressful for the injured child.

Frequently, these injuries are suitable for repair under local anaesthesia. In the presence of a well-stocked treatment room, repair of simple fingertip injuries can be facilitated, avoiding the need for full hospital admission and prolonged fasting for repair under general anaesthesia.

Our study evaluated all fingertip and nailbed injuries presenting to our Emergency Department in an 8 month period from January to August 2018. Out of 964 presentations for Plastic Surgery review, 226 concerned hand or finger injuries. Of these, 140 represented fingertip or nailbed injuries. Almost 40% of these underwent repair in the Emergency Department under local anaesthesia with or without nitrous oxide sedation. 25% required repair in the operating theatre under general anaesthesia and 35% were managed conservatively.

August was the busiest month for such injuries. Children undergoing nitrous sedation with local anaesthesia for these injuries ranged from 15months to 14 years, with a median of 4 years. In general, younger babies and more anxious or upset children were less suitable for sedation and local anaesthesia. All cases were followed up routinely in the Plastic Surgery clinic. Side effects of nitrous sedation were uncommon. There were almost no complications following these procedures.

This audit provides a snapshot of the usefulness of nitrous sedation in combination with local anaesthesia as a safe and

reproducible method of managing simple fingertip injuries in the paediatric setting. It highlights issues around provision for these services in the Emergency Department- staffing, equipment and training to name but some- but will surely assist in future resource planning.

P273 'KETING' THE KIDS TO SLEEP – IMPLEMENTATION OF A PAEDIATRIC PROCEDURAL SEDATION GUIDELINE AT A MIXED EMERGENCY DEPARTMENT

Tadhg Moriarty*, Gerard Markey, Umar Tarar. *University Hospital Waterford, Waterford, Ireland*

10.1136/archdischild-2019-epa.623

Introduction Ketamine hails from a stormy past, falling in and out of favour among our anaesthetic colleagues. However, the most recent data shows it has a favourable safety profile with relatively few absolute contraindications. This, combined with its applicability to a diverse patient cohort makes it a suitable choice for paediatric procedural sedation. University Hospital Waterford, a mixed emergency department, implemented a ketamine sedation guideline for use in our paediatric population in 2018. 33 patients successfully underwent sedation throughout the year with no major adverse events.

Aims The primary objective of this protocol was to enhance patient (and parent) experience within the ED. Secondary aims were reduced quaternary hospital referrals and less in-patient bed days. In-direct outcomes would include less parental (work) absenteeism, cost saving for parents, reduced hospital crowding, and a cost saving to the hospital.

Methods An extensive literature review, incorporating current UK (RCEM), Australian (ACEM) and American (ACEP) guidelines (and recommendations) for paediatric sedation was undertaken. Ketamine was chosen as the sole agent of choice and a comprehensive guideline was constructed. This four page document incorporated patient selection, resource requirement, adverse event management and a parent advice leaflet. Sedation training was offered to APLS trained middle grade doctors, while induction level training was provided to house officer doctors highlighting patient selection and the 'proceduralist' role.

Results 33 Paediatric procedural sedation have occurred since implementation. This has resulted in a direct cost saving to parents of €1680 for admission avoidance at UHW. Furthermore a cost saving of at least €4489 was made by parents in preventing onward travel to Plastic surgery at Cork University Hospital.

A post sedation survey of parents was carried out which revealed a high level of satisfaction of the sedation. One parent reported nightmares in their child that night, and one parent reported an episode of vomiting in the car journey home. All would opt for local ketamine sedation again if required.

Conclusion This successful implementation underscores the role of paediatric procedural sedation within a mixed ED. Positive parent feedback stresses the benefit of providing paediatric procedural sedation to a select cohort of suitable patients in reducing travel for quaternary hospital services, and less hospital bed days. Cost saving to parents, and local access to services bolsters a positive patient and parent experience