however, there hasn’t been enough evidence to favour one agent over the other.

**Objectives** Compare both the efficacy and side effects of mannitol vs 3% hypertonic saline in paediatric patients with intracranial hypertension caused by traumatic or non-traumatic aetiologies.

**Methods** Inclusive searches of electronic databases were conducted to identify scientific studies directly comparing the effect of mannitol against 3% hypertonic saline in children with increased intracranial tension. Search keywords included ‘mannitol’, ‘hypertonic’, ‘saline’, ‘cerebral’, ‘edema’, ‘intracranial’, ‘pressure’, and ‘hypertension’. Articles that met the inclusion criteria were identified and analysed.

**Results** We identified two randomized controlled trials, four retrospective studies, and two systematic reviews. The primary outcome studied was the improvement in intracranial pressure (ICP) and cerebral perfusion pressure (CPP), as well as mortality, duration of ventilation, and duration of coma.

In most of the included studies, HTS achieved greater reduction in ICP and increase in CPP compared to mannitol. HTS was associated with lower mortality, shorter duration of ventilation, and shorter PICU stays when compared to mannitol in children with traumatic and non-traumatic encephalopathies.

Only one study showed controversial results. This was a retrospective study done in patients with cerebral oedema due to diabetic ketoacidosis (DKA), which showed a higher mortality in the HTS group as compared with the mannitol group (3.7% and 2.6% respectively). However, this result was not statistically significant (p<0.34).

**Conclusions** According to the reviewed literature, HTS appears to achieve a greater reduction in ICP than mannitol with better clinical outcomes. However, there is paucity of high-quality evidence to support these findings. Larger multicentre trials are still needed to develop guidelines regarding which agent is preferred for use in the treatment for increased intracranial tension over the other.

---

**Abstracts**

**International Child Health Group**

**786** REFLECTIONS FROM A GLOBAL HEALTH OUT OF PROGRAMME EXPERIENCE (OOPE): PERSPECTIVES FROM TWO UK-BASED PAEDIATRIC TRAINEES

Helen Newsome, Jessica Wan. Tropical Health and Education Trust

10.1136/archdischild-2021-rcpch.198

**Background** Undertaking global health work can be an incredibly rewarding part of a clinician’s career. Well-designed OOPE’s offer invaluable learning opportunities to benefit the global healthcare community, the individual health-worker and the wider NHS.

**Objectives** To reflect on learning from the design, planning and implementation of a global health capacity building project, with focus on a collaborative approach as well as personal and clinical development for individual volunteers to bring back to their careers in the NHS.

**Methods** Between September 2019 and March 2020, Tropical Health and Education Trust (THET) recruited two paediatric registrar and one non-clinical programme and evaluation consultant to design and deliver a Health Education England-funded paediatric capacity-building project in Lusaka, Zambia. The project was collaborative and was co-designed by the volunteers and the local hospitals in which they were working.

The team worked locally with the paediatric teams in two ‘district level’ hospitals, Zambian Paediatric Association (ZPA) and Zambian Ministry of Health to understand the local healthcare needs, current ways of working and the social, economic and political context for change. Advice was also sought from the wider paediatric global health community (including RCPCH Global Links). Once local needs and priorities for paediatric care were identified, the team worked with local medical staff to design and deliver a bespoke one-day ABCDE training course using a ‘train-the-trainer’ approach to upskill local healthcare workers in the assessment and stabilisation of unwell children.

This project was unusual in global health as it involved non-clinical professionals in volunteer roles on the frontline. Having a mixed project team supported the clinical members to develop their management and leadership skills while planning and delivering a quality improvement project – these are essential leadership skills for NHS clinicians delivering change in complex systems.

**Results** Key learning:

- Collaboration is key, both within local systems and across professions. This project has highlighted several factors that lead to effective design and sustainable implementation of change:
  - Working closely with local and national clinical and political stakeholders from project conception allows for a high degree of buy-in giving local ownership increasing the success of the project. Hands-on clinical work alongside frontline healthcare workers fosters strong relationships to support change.
  - Involving a wider range of clinical and non-clinical professionals in health care (both in the NHS and abroad) improves project design and delivery and allows for skills development.
  - The global health community is becoming increasingly collaborative, with a desire to share learning and prevent duplication of work.

The volunteer clinicians found the project very valuable in terms of personal, clinical and leadership/managerial development. These are transferrable skills that are invaluable for working in the NHS.

**Conclusions** The learning and personal development opportunity provided by designing and delivering a change project within global health is considerable for NHS colleagues. Taking a collaborative approach to health care with local systems, the wider voluntary sector and across different professions can only improve the outcomes for both the global health care community, the NHS and the individuals involved.

---

**Child Protection Special Interest Group**

**787** EMERGENCY DEPARTMENT ATTENDANCES BY CHILDREN THOUGHT TO BE AT HIGH RISK OF EXPLOITATION

Jessica Lee, Carrie Hartwell, Tracy Tookey, Janet Craze. Oxford University Hospitals NHS Foundation Trust

10.1136/archdischild-2021-rcpch.199

**Background** Safeguarding children is an essential part of clinical care provision. As part of normal practice staff refer to
RENAL GENETICS CLINICS: HOW ARE THEY PERCEIVED?

Objectives To retrospectively review whether children identified as high risk of exploitation by the local Police Authority were attended by the Trust’s safeguarding team under an information sharing agreement, approved by our Caldicott guardian.

Methods All Emergency Department attendances between 1/12/19–10/09/20 were reviewed for the 44 children with the highest risk scores on the local Police authority exploitation risk matrix. We assessed reason for attendance, whether the child had a safeguarding flag on EPR prior to their attendance, whether safeguarding concerns were raised, what actions were taken and whether these actions were appropriate.

Results 25 children attended the ED during the date range reviewed, 13 had a safeguarding flag, and 9 had multiple attendances. The most common reasons for attendance were self-harm (12), traumatic injury (9) and violence (7). Guidelines were followed appropriately and completely in two thirds of attendances (29/41). The patient was not referred to the safeguarding team when they should have been in nine attendances. Additionally, in three instances where referral to the safeguarding team was made, it is not clear that appropriate ongoing actions were taken. All attendances where there was a lack of, or incomplete, appropriate safeguarding action involved children aged 15 years or over.

Conclusions Children identified as high risk by our local Police’s exploitation risk matrix attend ED frequently, and some are recurrent attenders. Most are older teenagers. Although detailed guidelines and a robust system of flagging exist, front line ED staff require further guidance on identifying those children at risk of exploitation as appropriate actions were not taken in all cases. One possible consideration is that older children presenting following violence are not being distinguished appropriately from adults on presentation as they are not seen by staff who primarily work with children. This presentation will highlight some of the proposed guidance.

British Association for Paediatric Nephrology

RENAI GENETICS CLINICS: HOW ARE THEY PERCEIVED?

Rachel O’Sullivan1, Ashaeta Gupta, Joanna Jarvis, Thomas Austin. NHS; Birmingham Children’s Hospital; Birmingham Women’s Hospital

Background NHS England recently initiated a reorganisation of genetic services across England to allow genetic testing to become more standardised and provide equality of access. This furthers incorporates genomics into all aspects of paediatrics.

Evaluation of family experiences of paediatric genetic services revealed common themes consistently reported by families as requiring improvement. These include a lack of information pre-clinic about what to expect, not being given written information to take home from clinic and desiring more follow-up once results were known than they received.

Multidisciplinary genetics clinics have been established at Birmingham Children’s Hospital (BCH) but their impact on family experiences was unknown.

Objectives A project was developed to determine the experiences of service users of the renal-genetics service at BCH and whether these are similar to the published literature.

Methods We wanted to understand how to help families feel adequately prepared for their appointment and ensure their concerns and questions were addressed in a time-limited clinic setting. Thus, we wanted to gather data on families’ opinions on the overall service structure but also their experience of their genetic counselling.

Existing, validated questionnaires were evaluated but none covered all the necessary aspects individually. Therefore, two separate questionnaires were adapted and sent out to all the families that had used the renal-genetics service so far. Anonymised results were collated.

Results Overall a 23% response rate was achieved. The majority of respondents had at least a basic idea why their family had been referred to the renal-genetics service and 45% had received written information about genetics clinics prior to their appointment.

Most families felt they had been listened to but two families felt they did not get to ask all the questions they wanted to. 81% of families reported they did not receive written information on genetics (testing) from clinic and 54% stated they would have liked to. Similarly, 64% did not receive information on relevant local voluntary or support groups and 57% of those would have found this beneficial.

The counselling results were varied across both understanding and the respondents’ emotional response towards the genetic situation within their family.

Conclusions Whilst overall feedback was positive, more can be done to improve the experiences of families.

More can be done to help prepare families for attending their genetics appointments and there is a need for high-quality information for families to take home with them. If such resources do not exist, their creation could be hugely beneficial to families.

Families sought recommendations for local relevant support or voluntary groups. This might not be possible for rare diseases due to low patient numbers. Families may accept distant disease-specific groups or prefer local but more generalised groups and this is something that may have to be explored with individual families.

The counselling feedback suggests a flexible, tailored approach may better meet the differing needs of all service users. This may help ensure families feel they get everything they need from clinic but could pose challenges in structuring clinic appointments.

REFERENCES