Context Every year almost 3000 children and young people die between the ages of 1 and 19 (ChildBereavementUK). The care that a child receives from medical professionals around the time of their death has lifelong implications for the family.

Problem At our hospital 70% of paediatric staff surveyed were not confident to offer support to be eaved families.

Assessment of problem and analysis of its causes The current bereavement leaflet was out of date and only relevant to the death of an adult. The staff surveyed felt they had not had adequate training.

Interventions

- Development of an updated Paediatric Bereavement Support Pack containing relevant information to support bereaved families and guidelines for staff on completion of legal formalities
- Training to increase the confidence of paediatric doctors and nurses in supporting bereaved families
- Training to improve the confidence and understanding of the procedures required after a child has died

Study design We surveyed 22 doctors and nurses working across the paediatric department including the ward, the paediatric emergency department and the special care baby unit. We asked them whether they were aware of the current bereavement pack, how to access it and whether they knew what support was available to grieving families. We asked them to identify agencies and professionals who should be informed of the death of a child.

Strategy for change We used a focus group to guide our development of a new leaflet appropriate for the death of a child and sensitive to a multicultural society. This highlighted that a checklist would be useful. The checklist included legal documentation required, professionals and agencies to inform, and references bereavement support references. We created bereavement packs containing all essential forms, the checklist and the updated bereavement leaflet and placed them in each of the main paediatric hospital departments. We conducted several multidisciplinary teaching sessions involving the named consultant for child death, the named nurse for safeguarding and a representative from the Child Death Overview Panel. They aimed to demystify the processes surrounding child death and to increase people's confidence in dealing with the death of a child.

**Measurement of improvement** Following our interventions and training we used the same questions to reassess the knowledge and confidence of 22 paediatric doctors and nurses.

Effects of changes Awareness of the bereavement pack increased from 55%(12) to 100%(22). Awareness of support available to families increased from 36%(8) to 95%(21). Before our interventions 55%(12) people surveyed were aware of the name of the named doctor for child death and afterwards 86%(19). Only 40%(9) of people surveyed before our interventions were aware of more than 3 agencies that needed to be informed of the death of a child; this rose to 82%(18) after the interventions. All of

the agencies are listed on the checklist included in the pack. Overall the confidence level of staff to support newly bereaved families improved from 23%(5) to 55%(12) (Figure 1). Feedback from the teaching described it as "informative", "interactive" and "a clear pathway".

Lessons learnt This study demonstrated the lack of confidence and knowledge of paediatric staff in management of child death and support of bereaved families. Our training and interventions improved confidence in dealing with child death.

Message for others Consultation with nursing and medical staff involved in child death is important in ensuring useful checklists and training. However, as child death is an infrequent and stressful event regular teaching is required to maintain and strengthen confidence.

## G533(P)

## DEVELOPMENT AND EVALUATION OF STANDARDISED FOLLOW UP PATHWAY FOR HENOCH SCHOENLEIN PURPURA

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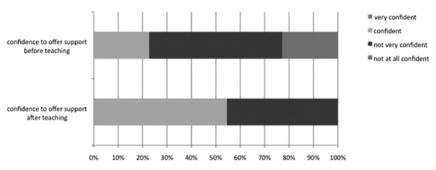
10.1136/archdischild-2015-308599.484

Context The quality improvement involved development of a follow up service for patients presenting to a busy district general hospital with Henoch Schoelein Purpura (HSP). Follow up is recommended as the rare but important renal sequelae of the condition can be silent initially.

Problem In our department no follow up pathway existed for HSP. Patients were seen in either consultant outpatient clinics, with the majority of children being well, or discharged for primary care follow up which relies on general practitioners and families to organise ill defined follow up creating the potential to miss any renal sequelae

Assessment of problem and analysis of its causes The problem was identified during the acute assessment of patients presenting. Following discussion with senior staff about absence of evidence based local follow up procedures and subsequent literature review a structured pathway was proposed. It was felt that all children should have hospital review with consultant follow up focusing on children with complications

Intervention The aim was to standardise and rationalise care thereby improving department efficiency without compromising patient safety. A pathway for nurse led follow up which had been piloted elsewhere (1) was used as a model. Children were assessed at presentation and guidance was given for those needing admission or investigation. Otherwise they should be discharged home with urine dipsticks to check early morning urine and information about what concerning features should lead them to seek



Abstract G532(P) Figure 1

reassessment. All children were seen seven days later and stratified according to absence or presence of proteinuria, as a marker for renal involvement, to standard follow up (four in the year) and more frequent visits (seven in the year) if proteinuria present. If proteinuria developed in the standard group, they moved to more frequent follow up. Urinalysis was undertaken at each follow up visit and criteria for consultant review were clearly defined.

(1) Henoch Schonlein Purpura – A 5-Year Review and Proposed Pathway. Louise Watson, et al

Strategy for change During the development stage senior nursing and medical staff were consulted about the practicalities and possibilities of developing a similar pathway and a guideline was produced with department ratification. Only limited information about the pathway was disseminated to junior staff before its introduction.

Measurement of improvement Sixteen months on, an audit and service evaluation was undertaken with feedback from patients, their families and staff.

Effects of changes Of 22 children followed up none developed renal sequelae at any time.

Almost half did not use consultant clinic appointments for follow up with seven completing the pathway appropriately, two having extra nurse follow up and one who had nurse follow up at different intervals to those recommended.

Ten children had consultant follow up, which was not clinically indicated.

Staff feedback was positive. Parents expressed the benefit of more flexible and quicker appointments for monitoring.

Although incomplete concordance with guideline, the process of follow up appears acceptable and manageable to patients, parents and staff. There were clinic slots released and the department generates income for nursing clinic appointments at each review.

Lessons learnt The main lesson learnt was the difficulty in engaging a wide group of people in a change of practice once implemented. This was particularly so when junior staff starting the children on the pathway in the acute phase change frequently. Different ways of working take time to be embedded. To try and mitigate this in future, wider team education is vital at implementation to improve awareness of the change and improve its use in practice.

Message for others To effect change, involving all relevant parties is essential from the start. It is important to educate and inform the wider team when a change of practice is implemented and to have an open dialogue within the team to monitor effectiveness.

## G534(P)

## IMPROVING PAEDIATRIC CLINICAL OUTCOME INDICATORS BY A COLLABORATIVE RETRAINING OF CHILD HEALTH PROFESSIONALS

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Context PICHEAM (Programme for Improvement of Child Health Hospital Management) was founded by a group of UK healthcare professionals with the objective of reducing childhood hospital mortality from treatable conditions in low-income countries. The project commenced in Burundi in collaboration with staff at two large teaching hospitals.

Problem Healthcare provision in Burundi is under-resourced, with WHO estimates of only 0.028 doctors and 0.19 nurses per 1000 population, and an under-five mortality rate of 83 per 1,000. PICHEAM identified that the two collaborating hospitals did not have local guidelines to standardise emergency management, resulting in significant variation in patient treatment and poor outcomes.

Assessment of problem and analysis of its causes Hospital admission data was analysed at the start of the project focusing on admission diagnoses, treatment plans, hospital stay and mortality. This showed a mortality rate of 6.7%, with over 50% of children dying on the first day of admission. PICHEAM planned to standardise practice via development of local guidelines and to focus on improving emergency management as a priority.

Intervention Best practice guidelines based on WHO recommendations were drawn up in collaboration with local staff, including protocols for managing emergencies. A simulation-based training package was developed to reinforce teaching of these protocols and develop team working skills, with local staff trained as facilitators thereby establishing a sustainable model.

Study design Morbidity and mortality data are regularly collected by local clinicians using routine hospital data sources.

Strategy for change PICHEAM aims to improve child health outcomes in participating hospitals over a three year period. This involves an initial period of working in partnership to observe practice, collect data, develop guidelines and build relationships with local staff. Guidelines were produced in 'handbook' format and disseminated to hospital staff. Results from audit of admission data were presented at local hospital meetings in Burundi and at PICHEAM meetings in London. Admission data is re-audited and participant feedback from the training sessions collected during each visit to measure change and optimise the teaching package.

Measurement of improvement Data was analysed comparing mortality rate, common diagnosis, length of stay by treated conditions and management in each clinical context.

Effects of changes The number of children diagnosed with pneumonia decreased from 2013 to 2014 (7.2% vs 10.6%) in parallel with an increase in rates of bronchiolitis (6.5% vs 3%) following teaching on the differences between the two diagnosis in children under 1 year of age. All children diagnosed with malaria received quinine in 2014 as opposed to 98.2% in 2013; fewer children with malaria received antibiotic therapy in 2014 compared to 2013 (11.6% vs 14.2%). The number of children with gastroenteritis treated with intravenous fluids increased (18.1% vs 15%) and more were prescribed antibiotics (18.4% vs 4%). The overall mortality rate as a proportion of all admissions did not show significant difference except after 5 days of hospitalisation (survival rate at day 10, 98.5% in 2013 vs 97.5% in 2014). Lessons learnt It is encouraging that there was an increase in bronchiolitis diagnoses, and that fewer children diagnosed with

bronchiolitis diagnoses, and that fewer children diagnosed with malaria were receiving unnecessary antibiotics. Implementing good data collection is an ongoing process however, and consolidation of work done so far will continue to highlight areas for improvement, such as management of gastroenteritis. The project is continually adapting based on feedback received and learning needs identified, and difficulties in accessing nursing and midwifery staff for training will be addressed in future visits.

Message for others PICHEAM is showing that an ambitious goal can been achieved by simple means; implementation and reinforcement of standardised best practice.