

Results 868 notifications were received during the study period, 365 unique reports met our case definition. The rest were either duplicates, non-cases or unable to verify. The first 46 non-cases where a questionnaire was also completed were evaluated.

18 (39%) had no CSF sample or culture result, 15 (33%) viral meningitis, 5 (11%) UTI, 4 (9%) sepsis, 3 (7%) was contaminant and 1 (2%) congenital hydrocephalus.

The median age (IQR) for the viral meningitis cases was 35.5 days (19–48), 10(67%) were male. The reported presenting features were fever 14 (93%), irritability 12 (80%), poor feeding 10 (66%), lethargy 8 (53%), poor perfusion 7 (47%), vomiting 2 (15%) and comatose 1(7%).

The median (IQR) CSF white cell count and CSF protein for the viral meningitis cases was 334/mm³ (120–475) and 0.85g/L (0.59–1.28) respectively.

Overall, two deaths were observed (one was a premature baby with multiple problems and the other died of Coxsackie meningitis).

Conclusion We have been able to evaluate the clinical features of viral meningitis in this age group

Further analysis needs to be done to compare the viral meningitis with the bacterial cases.

G142(P) USING A CHILD-FRIENDLY SURVEY TO OBTAIN FEEDBACK ABOUT THE HOSPITAL EXPERIENCE OF YOUNG INPATIENTS

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Aims The research aimed to obtain feedback from young hospital inpatients in a manner appropriate for their age and ability, to help NHS Trusts identify how they could make improvements in their paediatric services.

Methods A paediatric inpatient questionnaire was designed and piloted in 2010, focusing on the aspects of care that children and young people say are most important. The self-completion questionnaire is aimed at children (and their parents) aged 0–16 years, and is offered annually to NHS Trusts in England. 15 Trusts participated in the 2012 survey, which sampled patients discharged from hospital during February 2012. Questionnaires were posted to the home addresses of 850 patients/parents at each Trust, with two reminders being mailed to non-responders.

Results The overall response rate to the survey across all participating trusts was 34% and demonstrated a high degree of child involvement and completion. Children and their parents reported room for improvement with the amount of privacy they were given in hospital, involvement in decisions and the quality of hospital food. In contrast, NHS Trusts performed well on hospital cleanliness and overnight facilities for parents. Children had a preference to stay on a ward with others of a similar age, whereas same-sex wards were less important. The survey also revealed some differences in the views of parents and children, for example children were less likely than parents to feel that the hospital ward was well suited to their age group.

Conclusion The survey highlighted where there was most room for improving paediatric inpatient experience. The research demonstrated that children are willing and able to express their views and should be consulted about their healthcare experiences. For some question areas the views of children were shown to differ to that of parents. This emphasises the importance of speaking to children directly, and discourages using parent views alone as a basis for delivering care to children and young people.

G143(P) IS THERE A CASE TO EMPHASISE THE USE OF LUSCOMBE FORMULA INSTEAD OF THE ADVANCED PAEDIATRIC LIFE SUPPORT COURSE FORMULA FOR THE PAEDIATRIC WEIGHT CALCULATION?

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Aim To validate Luscombe's formula (LF) for paediatric weight calculation comparing with the measured weight and the calculated weight by the Advanced Paediatric Life Support (APLS) formula and applying it to various emergency treatment doses.

Methodology The study was conducted by prospectively measuring the weight of all children attending our outpatient department, day unit and observation and assessment unit. The weight of children between the ages of 1 year to 10 years was included but any children with severe health problems and eating disorders were excluded from the study. The weights were calculated using both Luscombes weight formula and APLS formula and compared with the measured weight.

Results Out of a total of 156 children, 102 were between the ages of 1 to 10 years. 9 of them were excluded in view of chronic health problems of significance and 93 children were included in the study. The mean measured weight in this group was 17.27 kgs while the mean of calculated weight by Luscombes formula was 18.89 kgs and by APLS formula was 15.9kgs, with the calculated means being within 10% deviation from the measured weight. The minimum measured weight was 8.45kgs and the maximum measured weight was 34.9 kgs. The minimum calculated weight by LF was 10kgs and the maximum was 34kgs, while the minimum calculated weight by APLS formula was 10kgs and the maximum was 28kgs all of which were within the normal distribution.

If we apply all the three mean weights practically in resuscitation the dose of adrenaline (1.7ml, 1.9ml and 1.6 ml of 1 in 1000) and shock do not vary significantly, but there is variation in the dose of Intravenous fluid bolus 345ml, 378 ml and 314 ml and Intravenous ceftriaxone based on the means of the measured weight and calculated weights based on LF and APLS formula.

Conclusion Both APLS formula and Luscombe formula provide guidance to calculate weight, in emergency to resuscitate the child with a difference of 7 to 10% from measured weight.

G144(P) A STUDY OF THE PATTERN OF ATTENDANCE AND PARENT SATISFACTION IN A PAEDIATRIC ASSESSMENT UNIT

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Aims In many UK hospitals, the Paediatric Assessment Unit (PAU) is part of the acute paediatric ward setting that receives acutely unwell children referred from a number of sources. This study aims to investigate the pattern of attendance to a PAU at a large District General hospital in the northwest and explores parents' satisfaction with the services provided, with the ultimate aim of improving the provision of such services.

Methods A retrospective study analysed patient admissions to the PAU, between August 2011 and May 2012, using data from an electronic database (n = 5456). In addition, a questionnaire was devised to measure parent satisfaction with the services offered. One hundred and nineteen parents who accompanied their children filled the questionnaire in the period between 21st May and 13th June 2012 (n = 119).

Results The mean age of children attending the PAU was 4.5 years. More children attended the PAU on weekdays than weekends, with Monday and Tuesday having the highest rates of attendance. The busiest times were from 17:00–22:00 hours. Despite a mean length of stay of 3.6 hours, parents were generally satisfied with this time (62%). Almost all parents were satisfied with the level of care provided (83.8%). Although the majority were also satisfied with the

level of information given (76.5%), there remained a substantial minority who were not.

Conclusion The number of patients attending the PAU varied across days of the week and times of day. Attention needs to be given to staffing PAUs between 17:00–22:00 hours as this is the busiest time with much reduced staffing usually. On the whole, parents were satisfied with their experience within the PAU. However, the length of stay of patients in the PAU needs to be reduced without harming the quality of patient care. A substantial minority were not satisfied with the level of information they received. This may be attributed to pressure of time on staff.

G145(P) DELPEDS: A TOOL TO IMPROVE THE PATIENT EXPERIENCE OF THE CLINICIAN'S WARD ROUNDS

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Aim Hospital admission can be a stressful time for most patients and parents. The aim of introducing this tool is to improve the parent and patient experience of the medical consultation and benefit maximum from the clinicians ward rounds.

Methods We designed a tool considering the common parameters a parent would like to know when their child is admitted as an inpatient (DELPEDS). We studied the validity of the tool over two of the first author's hot weeks. Parents were handed over the tool sheet at the time of admission to the ward so that they had enough time to read, think and add anything else they would like to know during the ward round.

Results Out of the 30 patients who were provided with the tool 22 patients gave feedback. All the 22 parents found it very helpful and there were positive comments that the tool helped them think various aspects of their child care and ask questions so that they had a clear understanding of their child's health, basic needs and probable discharge. For the clinician, it guided in having a structure and improves the consultation focusing on patient/parent need especially in a busy winter ward round.

Conclusion DELPEDS, provided clinician with a structured tool, guidance to parents regarding how they can benefit from medical consultations and seems to have improved patient experience of the ward rounds.

G146(P) THE IMPACT OF TEAMWORK AND PRACTICAL SKILLS TRAINING IN OBSTETRIC EMERGENCIES AND NEONATAL RESUSCITATION AT A TERTIARY HOSPITAL IN ETHIOPIA

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Aims To evaluate the effect on the stillbirth rate at a tertiary institution in a low-resource setting through the development of a multi-disciplinary training programme using local trainers.

Methods Twenty-one senior staff (anaesthetists, midwives, doctors, nurses and educators) completed a three day "training of trainers" course in the multi-disciplinary management of obstetric emergencies and neonatal resuscitation. These trainers then delivered six courses (each over two days) to 138 staff & postgraduate students actively involved in the care of labouring mothers and neonates. The course material was derived from the Ethiopian Federal Ministry of Health, World Health Organisation and Ethiopian Paediatric Society's guidelines.

Results The stillbirth rate over three months following the completion of the training project was compared with the rate in the three month period preceding the initial "training of trainers" course. The mean stillbirth rate fell from 7.6% (SD 2.1%) to 5.3% (SD 1.1%). However, this reduction was not statistically significant ($p = 0.08$).

A pre-course and post-course (true/false) test was used to assess the participant's knowledge. The average test scores increased from 65% (pre-test) to 85% (post-test.)

Anonymised feedback was collected to review the participants views and acceptability of using local trainers. 97% of respondents felt they had learnt something new. In addition, most respondents found local trainers to be acceptable and credible.

Conclusion The introduction of multi-disciplinary training in obstetric emergencies and neonatal resuscitation using local trainers brought about objective and subjective improvement in staff knowledge and may have contributed to a reduced stillbirth rate. Furthermore, a 'train the trainers' model has provided a potentially sustainable resource in the hospital which should continue to impact maternal and perinatal morbidity and mortality. However, further assessment of the impact is required and improvements in other aspects of the health service (such as regular audit and multi-disciplinary review of cases of mortality) are recommended.

G147(P) EVALUATING THE IMPACT OF INTRODUCING ADVANCED PAEDIATRIC LIFE SUPPORT TRAINING IN A TEACHING HOSPITAL IN ZAMBIA

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Aims The effective treatment of acutely sick children in resource-poor settings (including teaching hospitals in most developing countries) is limited by resources, but also by knowledge, skills and attitudes. Introducing rigorously-assessed, multidisciplinary training in paediatric life support may help address these issues, but there is limited evidence of the effectiveness of this approach.

As part of a Zambia-UK Health Link, we carried out a needs assessment at the Zambian partner's paediatric unit, which demonstrated that (a) most deaths were occurring within 48 hours of admission, and (b) staff expressed lack of confidence in dealing with acutely sick children. After assessing the options, we collaborated to establish Advanced Paediatric Life Support (APLS) training in Zambia.

Methods We assessed the impact of the APLS programme in 3 ways: (a) by semi-structured interviews with trainees, to assess the perceived relevance and impact of the training, with a mixture of free-form and 5-point Likert responses (b) by comparing mortality figures, from hospital records, before and after APLS training commenced in 2011 (c) by examining changes in clinical practise from a sample of case records (vital signs/emergency treatment recorded), after APLS training commenced.

Results In answer to "How relevant was the course to your everyday practise?", median response was 5 "Very relevant" – range 3–5; for "Will doing this course change how you practise?", median (range) response was 5 "A lot" (3–5).

Total mortality following admission decreased from 691 (15% of admissions) during Oct-Dec 2010 to 530 (12%) during Oct-Dec 2011 ($p < 0.001$). Deaths on the day of admission also decreased, from 149 (3.2%) to 102 (2.3%) respectively ($p < 0.01$). The proportion of patients with vital signs and initial management recorded showed a trend to increase from 2010 to 2011, though this was only significant for recording of heart rate.

Conclusion APLS training is perceived as relevant to their needs by healthcare staff in a Zambian tertiary paediatric unit, and has been associated with evidence of improved management and reduced in-hospital mortality. Further work is needed to establish whether the improvements were due to the training, and whether they are sustainable.