bronchiolitis. To identify the patient subgroups on HFNP requiring escalation of therapy to either other non-invasive or invasive ventilation. To identify any adverse events associated with HFNP therapy.

Methods Retrospective chart review from the local database (Carevue) of infants <24 months of age admitted to PICU with bronchiolitis between April 2011 and March 2012 for HFNP therapy. Length of stay (LOS), ventilatory requirements and risk factors were analysed.

Results Total of 74 patients received HFNP therapy during this period. Out of these, 26 (35%) patients were infants <24 months of age with bronchiolitis. Median age and LOS was 2.75 months and 6 days respectively. 7 infants (27%) were expreterms with chronic lung disease and 3 infants (11.5%) had congenital heart disease. 21 (80%) infants were RSV positive. A total of 10 (38%) infants were intubated directly and 16 (62%) infants had a trial of HFNP therapy. Overall, 3 (19%) infants needed escalation to mechanical ventilation. 13 (50%) infants received only HFNP therapy as respiratory support for bronchiolitis. All 26 infants were eventually discharged from the unit. No adverse events were identified with the use of HFNP therapy.

Conclusion HFNP therapy was successful in the vast majority of patients, particularly in those without risk factors. HFNP therapy has changed ventilatory practice in infants <24 months of age in our institution, and appears to reduce the need for intubation in infants with bronchiolitis.

G454 THE EDUCATIONAL IMPACT OF PAEDIATRIC PALLIATIVE SIMULATION STUDY DAYS

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Background The use of simulation based medical/nursing teaching is increasingly widespread. Simulation based teaching offers an immersive learning experience where professionals can practice communication and practical skills in a safe, authentic environment[1]. We designed a paediatric palliative simulation study day primarily aimed at nursing staff who manage these patients in the community/hospice. We believe this is the first of its kind in the UK.

Aims To establish whether attendance at a paediatric palliative simulation study day improved confidence and knowledge in management of common and/or difficult situations in palliative care.

Method Nurses and doctors working at local paediatric hospices or in associated specialities to palliative care were invited to attend the free one day course. Five scenarios were developed by experienced health professionals working in paediatric palliative care. On the day, participants were asked to complete a questionnaire to check basic demographic data, confidence levels, and knowledge (50 true/false questions). Following participation/observation of five scenarios they again completed the same questionnaire regarding confidence levels and knowledge. Results were analysed with Excel and XLStat using basic demographic data and Wilcoxon signed rank two-tailed test.

Results 22 nurses and three doctors have so far participated in two study days. 20/25 professionals described themselves as working primarily in palliative care. Only 8/25 had previously experienced simulation. Based on confidence questions, attendees felt more confident in managing specific end of life scenarios ($p < 0.008$). Based on true/false questions pre and post study day, 80% of participants improved their knowledge. The median improvement score for the cohort was 4 ($p = 0.001$).

Conclusion The study demonstrated a significant improvement in confidence and knowledge following the simulation course. This supports further time/financial investment in developing this type of study day. Simulation is a useful teaching adjunct in paediatric palliative care. The course also provides a valuable opportunity for professionals to network and discuss/share experiences.

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G455 ANTENATAL ADVANCE CARE PLANNING: 3 YEARS EXPERIENCE FROM A SINGLE CENTRE

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Background Advance care planning can improve outcomes including achieving preferences for setting of end of life care and appropriate use of life prolonging interventions. We have extended advance care planning to the parents of fetuses antenatally diagnosed with conditions that may require palliative care.

Aims To identify precipitating factors, timing and outcomes of antenatal advance care planning and compare with circumstances of end of life.

Methods Retrospective review of antenatal palliative care referrals over a 3-year period.

Results Fourteen mothers were offered antenatal advance care planning. Eleven foetuses had congenital heart disease; two Edwards syndrome; other diagnoses foetal alcohol syndrome, Potter syndrome, diaphragmatic hernia, duodenal atresia, cerebral ventriculomegaly with intraventricular haemorrhage and thin cerebral cortex. Two foetuses had healthy twins. Eleven families met with the team comprising foetal medicine, neonatology, paediatric palliative care and relevant paediatric specialties. Discussions included place and mode of delivery, care immediately after birth and setting of choice for end of life care. Three families opted to continue with attempts at life prolonging surgery. Input from the palliative care team influenced choices in place of delivery, mode of delivery and setting for care after birth. Thirteen of these babies have since been born; nine have died; two on the labour ward; one on the neonatal intensive care unit at 3 days of life; four in a children's hospice between 5 and 45 days of age; one baby at home at 9 days of age; one at 567 days from intercurrent illness on paediatric intensive care following successful palliative cardiac surgery. Two babies are still alive at 428 and 19 days. No outcome data was available for two.

Conclusions Antenatal advance care planning is an acceptable intervention that may alter preferences for place of delivery, mode of delivery and setting for care after birth. It is important to recognise that outcomes may be different to expectations and perinatal care plans need to reflect this.

G455 Antenatal advance care planning: 3 years experience from a single centre

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