This increases parental burden and impedes quality of life of both child and parents. A poll amongst parents of children with congenital anatomical anomalies showed a need to better prepare parents for hospital discharge with their chronically ill child. Besides, parents needed a ward providing a more structured environment for child and parents rather than the hectic PICU.

**Aim** Evaluation of a high dependence transitional care unit (HDTCU) as part of PICU care.

**Methods** A 6 bedded HDTCU for chronically ill children in need of intensive nursing care was built, managed under full (medical and nursing) responsibility of our PICU. Increasingly during admission, parents take responsibility of caring for the child. We calculated duration of admission and bed occupancy rate. Furthermore a survey was held evaluating satisfaction among parents.

**Results** Fallieterburgh is an extramural HDTCU providing care between PICU and home for children dependent on medical appliances. From January 2010 until April 2012, 33 children were admitted with a median length of stay of 50 days (range 4–345). Bed occupancy was 67%. Main appliances were: tracheal cannula 16 (48%), mechanical home-ventilation 3 (1%) and home parenteral nutrition 12 (36%). Parental satisfaction and parental confidence at discharge were high.

**Conclusions** Although the number of patients is too small to draw definitive conclusions, occupancy rates are high and parents seemed better prepared to accept full responsibility in home-care for their child.

### Abstract 814

**OUTCOME OF CHILDREN ADMITTED TO A REGIONAL PAEDIATRIC INTENSIVE CARE UNIT (PICU) WITH CONVULSIVE STATUS EPILEPTICUS (CSE)**

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**Background and Aims** Children presenting with CSE are commonly referred to PICU for ongoing care. Limited data is available on their outcome.

**Objectives:**

1. To determine mortality and short-term morbidity of children admitted to a regional PICU with CSE.
2. To identify differences in outcome for those with pre-existing epilepsy compared to non-epileptics.

**Methods** A retrospective cohort study of 57 children (1 month to 16 years) admitted to a regional PICU between January 2008 and December 2011 with CSE was carried out. Study population were divided into Group 1 (n=23, presence of pre-existing epilepsy) and Group 2 (n=34, absence of pre-existing epilepsy).

**Results** The results of the group 1 and 2 respectively were:

- **Median age (months):** Group 1 33 and 21.5, Group 2 32 and 21.5
- **Male: female ratio (%):** Group 1 57:43 and 76:24
- **Refractory seizures (>60 min) at presentation:** Group 1 83% and 53%
- **Deviation from APLS protocol for seizure control:** Group 1 43% and 32%
- **Extra doses of benzodiazepine:** Group 1 50% and 91%
- **Neurological co-morbidity:** Group 1 91% and 24%
- **Median duration of PICU ventilation:** Group 1 18.1 hrs and 10.5 hrs
- **Seizure control at PICU admission:** Group 1 61% and 94%
- **Midazolam infusion in PICU:** Group 1 96% and 97%
- **Neurological investigations (LP, CT/MRI Head, EEG):** Group 1 22% and 94%
- **Neurological morbidity:** Group 1 2 (aggressive behaviour, decerebrate posturing) and 1 (increased tone)
- **Mortality:** Group 1 0 and 0

**Conclusion** Epileptics presented frequently with refractory seizures and were ventilated longer though this didn’t affect total PICU stay; non-epileptics were investigated more frequently. Morbidity (5%) was still seen though there was no mortality in our study.

### Abstract 815

**PATIENTS WITH PRIMARY IMMUNODEFICIENCY DISORDERS IN PEDIATRIC INTENSIVE CARE UNIT: OUTCOMES AND MORTALITY-ASSOCIATED RISK FACTORS**

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**Introduction** Primary immunodeficiency disorders (PID) are characterized by poor or absent function in one or more components of the immune system. Early diagnosis and treatment is crucial for preventing morbidity and mortality. Despite adequate treatment, most of these patients require intensive care because of organ dysfunctions related to infections and HSCT complications. We reviewed our PID patients admitted to pediatric intensive care unit (PICU) over a 10-year period.

**Patients** and methods: PID patients, who were admitted to PICU between 1 January 2002 and 1 January 2012, were included. Data were collected from patient medical records.

**Results** A total of 51 patients (27 males) were admitted to PICU. There were a total of 71 admission episodes. The median age was 12 months. Age and sex were not significantly associated with mortality. The most common diagnosis was SCID. A total of 20 patients underwent HSCT. In all, 52 (73.2%) of all admission episodes were for respiratory problems, 10 (14%) for proven infections, 8 (11.4%) for neurological problems and 1 (1.4%) for surgical problems. Of the 71 episodes, 51 (71.8%) required mechanical ventilation, 11 (15.4%) required renal replacement therapy, 32 (45%) required inotropes. In all, 40/71 (56.3%) of the episodes resulted in survival. Requirement for ventilation, inotropes and renal replacement therapy were related with poor outcome. Multi-organ failure, PELOD score, duration of PICU admission were associated with mortality.