**Background and aims** Multimodal haemodynamic monitoring has an important role in PICU, because that can aid the intensivist to perform the management of children with acute circulatory failure.

The aim is to improve the interest of haemodynamic management with multimodal parameters to answer to the 3 most commonly asked questions: Complete clinical diagnosis, guide therapeutics, and repeat measures for evaluation.

**Methods** In this prospective study, between January 2012 and April 2014, the assessment of haemodynamic was obtained progressively by NIBP, TTE, and estimated continuous cardiac output (esCCO), and/or Oesophageal Doppler, an/or pleth variability index (PVI) for each patient with ACF.

**Results** On a total of 33 patients with ACF, all patients was treated:

- Volume expansion in 31 patients « fluid responsiveness based on the respiratory variation aortic flow peak velocity $\Delta$ Vpeak ao, SV, and inferior vena cava, and/or PVI, FTc, $\Delta$ Vpeak by OD .

- 29 responder ($\Delta$ SV ≥ 10% by TTE, esCCO and/or OD).
- 2 non responder ($\Delta$ SV < 10%).

- Norepinephrine was introduced in 14 patients (objective MAP and or PPC for SPTBI), 2 of them had a profound vasoplegia « DAP < 40 mmHg.

- Dobutamine was introduced in 2 patients with LVEF < 45% (TTE).

**Conclusion** MHM allows optimisation of systemic haemodynamic: assessment of CO, blood volume status, vascular resistance and contractility.

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PO-0330 | **HEALTHCARE-ASSOCIATED INFECTIONS IN A PAEDIATRIC INTENSIVE CARE UNIT**

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**Introduction** Healthcare-associated infections (HAI) are a common cause of higher morbidity, mortality and longer stay in PICU.

**Objective** Characterisation of HAI: tracheobronchitis, pneumonia, bloodstream infection (BSI) and urinary tract infection (UTI) in our PICU, for a 12 month period (2013).

**Methods** Retrospective review of clinical data from patients admitted >48 h, using a modified patient-based HELICS protocol. HAI was defined according to the Centre for Disease Control.

**Results** From a total of 450 admissions, 233 patients were included. Mean age was 6,7 years (0–18), mean length of stay was 6,6 days (3–67), and the majority had antibiotic on admission (87%). Seventy one patients (31%) were mechanically ventilated, 41% had CVC and 33% a urinary catheter.

Fifteen children had a total of 21 HAI (9%): 16 respiratory infections - 13 pneumonias and 3 tracheobronchitis (19,8 and 4,6/1000 days of ventilation, respectively), 2 primary BSI – one related to CVC (1,4/1000 days of CVC) and 3 UTI (2,9/1000 days of urinary catheter). The most common pathogens were *Pseudomonas aeruginosa* and *Enterobacter cloacae* in respiratory infections. *Staphylococcus hominis* and *Candida parapsilosis* were identified in BSI and *Escherichia coli, Enterococcus faecalis, Candida parapsilosis* in UTI. Mean length of stay was 26,9 days

in the HAI group versus 5,2 days in non HAI group. There was no HAI related mortality.

**Discussion** The incidence of HAI was similar to other European Units. We found a higher rate of respiratory infections than that of a previous study in our PICU, emphasising the importance of monitoring and preventive measures.

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PO-0331 | **THE EFFECTS OF INCREASED AWARENESS ON MEDICATION ERROR DISCLOSURES**

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**Background** Communicating medication errors is a crucial part of patient care. Children are exposed up to three times the rate of potentially dangerous adverse drug events. A previous evaluation of disclosure of medication errors identified barriers in communicating these errors.

**Methods** Two presentations on medication errors and how to improve their communication with patient/family were presented to the PICU team. A Medication Error Data Entry Form was used to collect the number and type of medication errors (only type C through I require immediate notification to the MD). Communication to family was documented in a separate form.

**Results** Thirty-four medication errors were recorded over a 4-month period (2 months before and 2 months after education). Fifty-three percent were type A errors (circumstances or events that have the capacity to cause error) while the remaining were type C (an error occurred that reached the patient but did not cause patient harm) (Table 1).

**Abstract PO-0331 Table 1**

| Group | Type A Error | Type C Error | MD Notified | Family Notified |
|---|---|---|---|---|
| Before Education | 46.7% | 22.2% | 100.0% | 50% |
| After Education | 20.0% | 75.0% | 91.7% | 31% |

While the fellows did not participate in the communication of errors to patient/family before education, they did in 60% of the notifications afterwards. The two barriers to communication were "family was not available" (43%) and "error did not cause side effects" (57%).

**Conclusion** This study demonstrates that despite the effort to increase awareness of medication errors disclosure there was not an improvement in communicating of medication errors to the patient/family. A more systematic and aggressive approach to education on communication may be required to properly address and improve the disclosure of medication errors.

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PO-0332 | **BARRIERS TO DISCLOSURE OF MEDICATION ERRORS**

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**Background** Medication administration error is the most frequent error in paediatrics and one of the leading causes of death. Adverse event reporting is critical to improving patient