BP \((r=-0.57/m/s; 95\% \text{ CI} -0.67 \text{ to} -0.45)\). cIMT in five-year-olds was 0.61\(\mu\)m greater per 1mmHg increased maternal BP.

Eight studies explored the impact of fetal growth restriction (FGR) or small for gestational age (SGA), and three explored prematurity. FGR infants had a greater rise in brPWV between 1 week and 6 months old compared to appropriately grown infants (1.5 vs 0.9 cm/s increase, \(p=0.03\)); however, aPWV and SIX did not differ between groups. One-week-old SGA infants had higher weight-adjusted aIMT (383±163 vs 256±43\(\mu\)m/kg, \(p<0.001\)) and SIX (2.0±1.7 vs 1.1±0.4\(\beta\)/kg, \(p=0.005\)) than appropriately grown infants. Prematurity was associated with increased aortic stiffness in 2/3 studies: for example, Alx values were 5% higher (95% CI: 2%-8%) in 11-year-olds born ≤25 weeks. However, in six-year-olds, SIX and cIMT were similar in term and preterm (<27 weeks) cohorts.

Conclusions Studies included used diverse methods and different ages of participants, and inconsistent definitions for SGA/FGR were applied. Nevertheless, the perinatal environment appears to influence offspring arterial structure and function in preadolescent children. Future research should aim to establish reference values for arterial stiffness-related measures in preadolescent children using consistent methodologies, in order to allow earlier, targeted clinical and public health interventions focused on those at the highest long-term cardiovascular risk.

Association of Paediatric Palliative Medicine

HEALTHCARE PROFESSIONALS’ EXPERIENCES OF THE BARRIERS AND FACILITATORS TO COMMUNITY PAEDIATRIC PAIN MANAGEMENT AT END-OF-LIFE

Background Inadequate pain management in community paediatric palliative care is common. Evidence to inform improved pain management in this population is limited.

Objectives To explore the barriers and facilitators to paediatric community-based pain management for infants, children and young people at end-of-life as perceived by healthcare professionals.

Methods Semi-structured qualitative interviews were conducted with 29 healthcare professionals; 12 nurses, five GPs, five consultants and registrar doctors, two pharmacists and five support therapists working in primary, secondary or tertiary care in the UK and involved in community end-of-life care of 0–18-year-olds. The data corpus was analysed using an inductive thematic analysis.

Results Seven themes emerged from the data: parents’ abilities, beliefs and wellbeing; working relationships between families and healthcare professionals; healthcare professionals’ knowledge, education and experience; health services delivery; nature of pain treatment; and paediatric-specific factors. Across themes, the concepts of partnership working between families and healthcare professionals, and within healthcare teams, and sharing expertise were prevalent.

Conclusions It is important that healthcare professionals and parents work together, and that mutual trust is built up through two-way conversations. Community healthcare professionals would benefit from education from experienced multidisciplinary teams to effectively manage paediatric pain at end-of-life and prevent emergency hospice or hospital admissions, particularly during the COVID-19 pandemic.

British Paediatric Neurology Association

MANNITOL VS 3% HYPERTONIC SALINE IN CHILDREN WITH INTRACRANIAL HYPERTENSION: REVIEW OF THE CURRENT EVIDENCE

Background Hyperosmolar agents have been used for a long time in managing patients with increased intracranial pressure due to different aetiologies. Mannitol and 3% hypertonic saline (HTS) are the most used agents in paediatric patients;