Background Necrotising enterocolitis (NEC) is the commonest gastrointestinal emergency among premature infants, and accounts for significant morbidity and mortality. Breast milk (BM) is considered as the best nutritional option to prevent NEC. Traditionally cow’s milk-based fortifier is added to BM to optimise growth of extremely premature infants, thus potentially increasing the risk of NEC. More recently the value of replacing the traditional cow’s milk-based fortifier with human breast milk-based fortifier [resulting in the concept of an exclusive human milk (EHM) based diet] has been demonstrated to reduce NEC, improve feeding tolerance, reduce dependence on parenteral nutrition and enhance growth. We report the nursing/midwifery experience of introducing EHM for the first time in Ireland, through a qualitative study.

Aims To explore nurses’ and midwives’ perspectives on the provision of human breast milk-based fortifier in an Irish neonatal unit for the first time.

Methods Seven senior neonatal nurse/midwives, who were involved in hands-on provision of human breast-milk based fortifier in the NICU at University Maternity Hospital Limerick (UMHL), were offered a semi-structured questionnaire. Following audit committee approval, a thematic interpretive qualitative study was conducted.

Results Four themes were identified based on 54 feeding episodes noted in 2017 and 2018 from the two extremely low birth weight (ELBW) infants who were offered human breast milk-based fortifier for the first time in Ireland. Key observations, experiences, expectations and barriers highlighted were analysed. Themes noted were, 1. breastfeeding improvement and culture, 2. feeding tolerance, 3. educational needs and support, and 4. confidence and concerns of nurses/midwives. Sub-themes identified were further evaluated.

Conclusion Supportive environment and targeted staff education within NICU would assist in maintaining high breastfeeding rates as well as implementation of an exclusive human milk diet for ELBW infants.

Background Parents struggle to deal with fears of infant wellbeing in unfamiliar environments such as the neonatal intensive care unit (NICU). These challenges are further heightened for parents who do not perceive themselves to be fully integrated into the society in which they are receiving care, e.g. the Traveller community. Disadvantages such as poor education, socioeconomic deprivation, unemployment and poverty are more prevalent in this population. Their culture, ethnicity and nomadic lifestyle makes them often untrusting of institutions and lends itself to poor attendance, engagement and compliance with health services. For nurses/midwives to practice neonatal care with cultural sensitivity, understanding of their cultural beliefs, patients’ perceptions of illness, and past experiences with healthcare providers would be important. There is paucity of focused studies on NICU staff perspectives on specific cultural issues affecting newborn infants of the Traveller community.

Aims To explore nurses’ and midwives’ perspectives on the provision of culturally sensitive care in a neonatal setting to infants born to parents from Traveller community.

Methods Following ethical approval, a descriptive qualitative approach was used to conduct face-to-face interviews with ten nurses/midwives from an NICU in the Mid-West of Ireland and four themes were identified.

Results Four themes noted were, 1. Barriers to breastfeeding for women from the Traveller community included sub-themes of cultural influences, impact of the Beutler test and nurse/midwife assumptions. 2. Cultural Issues around trust, religion, rigidity of the healthcare system and social supports. 3. Educational deficits relating to poor literacy of the Traveller community resulting in barriers to seek health promotion opportunities. 4. Nurses/midwives’ concerns, incorporating infant discharge, post-discharge safety and perceived exposure to domestic violence.

Conclusion Information on the nature and extent of the challenges encountered by staff in providing culturally sensitive care to the Traveller population included sub-themes of cultural influences, impact of the Beutler test and nurse/midwife assumptions. 2. Cultural Issues around trust, religion, rigidity of the healthcare system and social supports. 3. Educational deficits relating to poor literacy of the Traveller community resulting in barriers to seek health promotion opportunities. 4. Nurses/midwives’ concerns, incorporating infant discharge, post-discharge safety and perceived exposure to domestic violence.

Background Congenital chylothorax (cc) is a rare condition. It consists on an accumulation of the chyle in the pleural cavity. It is associated with significant morbidities including respiratory distress, malnutrition, immunodeficiency and infections. The treatment of congenital chylothorax is still not well codified. We have focused on postnatal management and after review of the literature we propose an algorithm of the treatment of congenital chylothorax.

Methods We report five cases of congenital chylothorax admitted to our neonatal intensive care unit between 2010 and 2018.
Results There were 3 males and two females. Prenatal diagnosis was made in 4 cases. There were 4 full-term newborns and one near term of 36 weeks. Pleural effusion was on the right side in three cases, on the left side in one case and bilateral in one case. Four cases required mechanical ventilation. Somatostatin was indicated in one case. The treatment was successful in four cases. One case presented a dysmorphic syndrome was died by pneumothorax.

Conclusions The treatment of congenital chylothorax is based on conservative management. Somatostatin or its analog octreotide are considered as an adjunctive treatment of congenital chylothorax. However, the refractory cases are treated with chemical pleurodesis or surgical treatment. We propose an algorithm of the treatment of congenital chylothorax after review of the literature.

Introduction Arrhythmias in neonates are rare with an incidence reported to be 1 to 5%. Their diagnosis and treatment differs substantially from approaches used in an older child. Through this study we aim to identify epidemiology, clinical features, management and outcome of neonatal arrhythmias.

Patients and methods It’s a retrospective study of all cases of arrhythmias hospitalized in the neonatal intensive care unit of Sfax between 2004 and 2018.

Results We registered 10 cases of congenital atrioventricular block (AVB), 8 cases of flutter and 2 cases of chaotic tachycardia. A male predominance was noted with a sex ratio of 2.3. Prenatal diagnosis was performed in 5 cases of atrial flutter by fetal echocardiography which was indicated because of fetal anasarca in 3 cases, a dilatation of the right heart cavities in one case and a fetal tachycardia in one case. Prenatal treatment was administered in 4 cases of atrial flutter. It was based on amiodarone in one case, digoxin in two cases and digoxin associated with sotalol then relayed by flecainide in one case. Ten newborns presented signs of heart failure. For the others, the clinical manifestation was an anomaly of the heart rhythm (bradycardia or tachycardia). Diagnosis was confirmed in all cases by electrocardiogram. Echocardiography was performed for all patients. It showed tight pulmonary narrowing in a case of flutter and transient myocarditis associated to an AVB in one case. After birth, an external electric conversion was necessary in 4 cases of atrial flutter and a pacemaker implantation was indicated in 5 cases of AVB. In the other cases, the treatment was medical (amiodarone for tachycardia and isoproterenol for AVB). Only 4 newborns with AVB died in the post operative course of the pacemaker implantation. For all other newborns the evolution was favorable.

Conclusion Neonatal arrhythmias can be serious and life threatening. The prognosis depends on the prompt of diagnosis which can be challenging at this age. Management must be rapid and multidisciplinary. Hence we insist on the importance of prenatal diagnosis.