

Results Table 2 shows the influence of unsuccessful breastfeeding factors in first day after delivery.

Conclusion Maternal causes have the most strength, and educational, hospital, and newborn causes have intermediate preventive relation as unsuccessful maternal breastfeeding factors. Cultural causes have the most strength indirect preventive influence on unsuccessful maternal breastfeeding, but epidemiologic causes have not significant relation with unsuccessful maternal breastfeeding.

PO-0601 WITHDRAWN

PO-0602 WHAT DO PARENTS THINK ABOUT PROBIOTIC USE IN PRETERM INFANTS?

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Background and aim Meta-analyses show that probiotics significantly reduce necrotizing enterocolitis (NEC) and/or mortality in high-risk preterm infants. Since January 2013, our centre has offered a routine combination probiotic (Infloran®) to preterm infants. We provide written parental information and give parents the opportunity to opt out. We wanted to evaluate parents' opinions on probiotic use in preterm infants.

Methods In December 2013 we conducted a postal survey of all 80 sets of parents of the 90 babies given probiotics in the period Jan–Nov 2013 who survived to discharge.

Results No parents have yet declined probiotics in our NICU. Responses were received from 53 parents. Of these, 74% considered it unnecessary to inform parents prior to starting probiotics; 90% had not worried that their baby was being given live bacteria; 88% were unconcerned about possible unknown risks of probiotics; 88% reported their anxieties in the NICU were eased by knowing their baby was receiving probiotic treatment. Almost all (96%) considered that parents of high-risk premature babies born at other units that do not yet offer probiotics should nevertheless still have the right to be informed of the evidence that probiotics reduce NEC and save lives; moreover 64% felt that, given the current evidence, those parents should not only have a right to be informed but should also be allowed the option of probiotics for their babies.

Conclusion Parents informed of the evidence and offered the option of probiotic prophylaxis for their babies appear to understand and appreciate the evidence and enthusiastically embrace probiotic usage.

PO-0603 LACTOFERRIN AND NICU ENVIRONMENT AFFECT FAECAL BACTERIA OF PRETERM INFANTS

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Background and aims The effects of lactoferrin [LF] on neonatal gut bacteria is unknown. We theorised LF has a greater impact on gut microbiota than the NICU environment.

Methods Ten very preterm infants received enteral recombinant human lactoferrin [rhLF], while 11 infants received placebo for the first 28 days of life. We collected a faecal sample on day 21. We sequenced amplicons made from the V1 – V3 region of bacterial 16 S rRNA in faeces. QIIME and mothur processed filtered reads to classify operational taxonomy units [OTUs] with >97% sequence similarity. Statistical analyses used SPSS.

Results Mean faecal OTUs per infant were higher in NICU1 (mean = 63,284) versus NICU2 (48,080, $p < 0.001$). Reasons for higher OTUs in NICU1 were less antibiotics versus NICU2 (mean = 4.7 vs. 9.5 d, $p < 0.002$); NICU1 used early enteral nutrition in NICU1, while infants in NICU2 received more parenteral nutrition ($p < 0.007$). *Veillonella* as a marker of gut microbiome maturity was higher in NICU1 (mean OTUs = 13,146 versus NICU2 = 1909, $p < 0.04$). A placebo-treated infant with necrotizing enterocolitis had 58,071 OTUs of *Enterobacter hormaechei* in the faeces. Infants given placebo had more *E. hormaechei* (mean OTUs = 23,661) versus rhLF-treated babies (mean = 2330, $p < 0.03$). Two neonatal pathogens, *S. aureus* and *Pseudomonas*, were lower in the faeces of rhLF-treated infants ($p < 0.03$ and $p < 0.01$, respectively).

Conclusions rhLF modulates gut bacteria of preterm infants. The NICU habitat also significantly affects the intestinal microbiome. Research must show if bovine LF also reduces faecal pathogens in very preterm infants.

PO-0604 EARLY PROTEIN AND CALORIE PROVISION ON A TERTIARY NICU

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Background and aims Meeting the nutritional requirements recommended by ESPGHAN remains challenging during early NICU care.

We aimed to evaluate local practice and compare provision to recommendations.

Methods In this retrospective study, nutritional data were collected from birth on all neonates admitted to a tertiary referral centre from September to December 2013. Data were obtained from the national database and medical notes.

We assessed enteral and parenteral intake and calculated protein (Grams/Kg/day) and Calories (Kcal/kg/day). Enteral feed data collected included volumes of breast, donor and formula milks. Protein and calorie intake were calculated based on known milk composition values.



Abstract PO-0604 Figure 1