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Editorial

Preventing a fall from innocence

Following the "innocent declaration" (Unicef, 1990) on the promotion and support of breast feeding, made in Italy in the summer of 1990, the Baby Friendly Initiative was launched. Baby friendly, a global partnership between WHO and UNICEF, promotes policies which help parents build a close and loving relationship with their baby, and through that relationship they have been able to increase breastfeeding rates worldwide over the subsequent three decades (WHO, 2019). For many neonatal nurses it is difficult to remember a time before which Baby Friendly influenced our practice; with family centred and family integrated care policies all developing in ways which are commensurate with the concept of building that close and loving relationship between parents, indeed extended family, and the baby.

As we approach the autumn, or fall, of 2019, we present a collection of articles, the majority of which are concerned, to some extent, with feeding babies in the neonatal unit. For some of these articles the association is clear, with others more tenuous, but all carry the legacy of innocence.

Our first article is a review of Pierre Robin Sequence by Katherine Jameson, an American author. Personally, with a background in the epidemiology of congenital anomaly, I enjoyed this well presented and well researched review of this rare condition. Part of the fascination of embryology is that it helps us, as neonatal nurses, to understand the pathophysiology of a condition with which we are presented. Studying the epidemiology of congenital anomaly reveals something about their aetiology and the possible causes, with a view to primary prevention. Although there is a known genetic cause for some cases, for the most part this sequence is still unexplained, but desperately important in neonatal care. Firstly these babies are often born with a compromised airway. As discussed in our April 2018 editorial, a baby born with an undiagnosed facial defect which affects his or her ability to breathe is a really stressful event for a doctor or nurse practitioner attending a labour. Some knowledge of the potential anatomy, for instance the position of the tongue, is useful in making clinical decisions about the emergency management. In the longer term these babies often have feeding difficulties, being anatomically challenged in sucking, or in the co-ordination between sucking and swallowing. One of the pillars of The Baby Friendly initiative is that mothers are encouraged, educated and facilitated in expressing breast milk, and some of these babies can only be fed through an enteral feeding tube. It is not impossible to establish breast feeding after surgery (Summers et al., 2014) but establishing any feeding regime in this population is extremely challenging.

An invaluable member of the multidisciplinary team involved in establishing feeding in the neonatal unit is the speech and language therapist (SALT). Traditionally they received referrals for babies with diagnosed airway/gastrointestinal problems which interfered with the ability to feed, gradually getting more involved with those babies who had trouble feeding simply as a result of prematurity. Melanie Peck, Alexandra Connolly and Brenda Carty, a team working in London, carried out a review of SALT practice on a local "level two" unit. A comparative quality improvement project (QIP) was carried out comparing a model where a SALT was physically present on the unit rather than simply "available to take referrals", the latter being the traditional model. When a SALT was physically present, referral rates did not actually increase, but happened earlier, getting later again when the allocated SALT was withdrawn after the QIP finished. The SALT was able to assist with skin to skin contact, positive touch and helping parents to recognise positive cues for feeding. Although the paper reports that oral feeding rates increased these are all things recommended by Baby Friendly and commensurate with family cantered/family integrated care. The National Quality Board (2018) recommends frequent reviews of the multidisciplinary team with a view to optimising neonatal care in England. This small QIP demonstrates that the present of a SALT, as part of the team, contributes positively to the quality of care experienced in the less acute units, and may assist those preparing business cases expand the team.

Our next article may prove controversial, but it would be useful to open a debate. Kathryn Beardsall, another UK researcher, has produced practice guideline encouraging the use of nipple shields to help establish and maintain breast feeding, both in the neonatal unit and with term babies. The evidence for the use of nipple shields is sparse, but positive (Aloysius, 2007). Beardsall reassures us that Baby Friendly guidelines do not preclude the use of nipple shields and claims that they are commensurate with the spirit of Baby friendly as they "protect and support breastfeeding" and "enable babies to receive breastmilk and to breastfeed when possible". We would like to strongly invite letters to the editor with readers' experience of and views on the use of nipple shields.

Suseela Mulupuru, Anita Siddu, Srinivas Murki, Saikiran D and Anupama Reddy, a team working in India, carried out a really lovely randomised controlled trial where 100 babies born at over 37 weeks' gestation were randomised to have routine care, including examination on the radiant warmer and encouragement to breast feed within two hours of birth (normal practice), with a further 100 randomised to an intervention group. The intervention group had delayed cord clamping and were dried and, covered with a dry sheet, placed prone and encouraged to crawl on to their mothers' breast for their first feed. It is a little surprising that, although mothers in the intervention group were more satisfied with their care, there was not a statistical difference in breast feeding rates at six weeks or six months as a result of this intervention. Sadly the likes of these term babies, born by normal vaginal delivery, are seldom seen by neonatal nurses. It is interesting however to know that new and thought-provoking ways, which are actually very old ways, are being investigated to promote skin to skin contact. On the neonatal unit it is not always easy to introduce skin to skin contact as

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soon as we would like. As well as the universal problem of lack of skilled personnel (Alenchery et al., 2018), the babies condition can prevent it – but it is important to keep it at the forefront of the neonatal nurse's mind.

August, Ullman, Rickard and New wander into more traditional scientific territory for the next article. They have carried out a very comprehensive survey of devices and techniques used for the insertion of peripheral intervenors lines in Australia and New Zealand. Their conclusion that there are a great variety of practices used in the clinical area is true for so many aspects of our care. This is simply a survey and hopefully their conclusion that more research, in order to optimise both devices and techniques, will be taken up by either that or another team. It is important that very common proceedures such as these are standardised.

Sahar Rasoulia and Mahboobeh Namnabatib complicate the issue. Even where there are clear guidelines for carrying out venepuncture on a neonatal they are not universally adhered to. This is an educational paper, with the authors using Kolb's theory, a reflective method of learning, to improve the performance of the neonatal nurses. They were able to show a statistical improvement in adherence to the local guidelines in a post-test after their intervention. This has implications for August and her team. Even when guidelines are written, good practice is dependent on adherence to them. Here is another area where research is required.

Saikiran Deshabhotla, Veda Vallala, Baswaraj Tandur and Sreeram Subramaniam tried to find the best method for calculating umbilical catheter length. Working in India, they used a randomised controlled trial to compare the Dunn and Shukla methods. Their sample was relatively small and they did not find a statistical difference in the proportion of catheters correctly placed using each method. It is, however, important to keep reporting these small studies as they add to the evidence base, and may contribute to a definitive answer to the question eventually.

In the past, in a UK study, nurses trained in respiratory management have been shown, not only to be capable of safely managing the care of ventilated neonates, but to shorten their time on the ventilator and ultimately their time in intensive care (Luyt et al., 2002). Shilpi Chabra, Thomas Strandjord and Eric Peeples revisited this question in an American study; postulating that nurse practitioners would have more experience of advanced methods of delivering respiratory support and would therefore ultimately achieve improved outcomes. It is interesting, and perhaps indicative of the advances in practice by neonatal nurses over the past decade, that the emphasis now seems to be on proving the safety of the junior doctors' practice rather than that of the nurse practitioner. Although the nurse practitioners were indeed more adventurous in their use of ventilation modes the researchers found no difference in any of the outcomes measured (including death or severe BPD, moderate BPD, time on oxygen, length of stay and others) except retinopathy of prematurity (ROP) which was significantly higher in the group managed by nurses practitioners. The authors could not explain this difference. It may have occurred by chance or conceivably because there were more male babies in the nurse practitioner group, but that is unlikely. As a finding it is extremely worrying. The association between the administration of high levels of oxygen to premature babies was first discovered in the 1940's (Terry, 1942). The international collaboration which carried out the oxygen trials found that ROP was associated with targeting higher oxygen saturation levels (Askie et al., 2018) and international guidelines have been produced as to what the optimal levels are (Sweet et al., 2017) However, as all the babies were managed on the same unit it would be reasonable to suppose that they were all subject to the same oxygen administration policies. As the time on oxygen was similar for the two groups it is difficult to imagine that higher oxygen saturation levels were tolerated in the group managed by nurse practitioners than the group managed by doctors. Management of oxygen saturation levels is usually achieved by the bedside nurse rather than the practitioner/doctor so, unless the nurse practitioner group were handles more, there should have been no difference.

And so we end our articles with a mystery, but hopefully one which will encourage all nurses to think about their own practice around delivering oxygen to premature babies, and perhaps stimulate more research into better l ways of targeting oxygen delivery at the optimal levels. This fall, as the membership of the Neonatal Nurses Association continues to grow in the UK; their conference will take place on 22th November 2019 at the Hilton East Midlands Airport Hotel and is well worth a visit. In the spirit of the Innocenti declaration and the internationally celebrated policies which followed it, the conference will continue to explore innovative ways to help parents build a close and loving relationship with their baby, and to optimise the care given to the whole family by health care professionals on the neonatal unit.

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