

Neonatal Palliative and End of Life Care (NPELC): developing skills through simulation education

Jennifer Peterson Neonatal Registrar and Simulation Fellow (jennifer.peterson@mft.nhs.uk); **Sunaya Hirani** Neonatal Registrar and Simulation Fellow; **Tom Hogan** Neonatal Consultant; **Clare Robinson** Neonatal Bereavement Team; **Cath Rylance** Neonatal Bereavement Team; **Helen Millar** Neonatal Unit Counsellor; **Ruth Gottstein** Neonatal Consultant; **Michelle Parr** Neonatal Consultant; **Edward Gasiorowski** Neonatal Consultant

Neonatal Intensive Care Unit, St Mary's Maternity Hospital, Manchester Foundation Trust

What is the NPELC course?

The Neonatal Palliative and End of Life Care (NPELC) simulation course is a two-day course designed to provide participants with the opportunity to expand their palliative and end of life care knowledge and experience. The course is structured around a series of small group simulation scenarios, interspersed with whole group discussion sessions to consolidate the learning from the simulations. Our scenarios have been developed from clinical experiences and risk reports, all adapted to allow participants to explore a range of situations where palliative and/or end of life care would be appropriate and improve infant and parent experience (TABLE 1). The scenarios are neonatal based, with overarching concepts that would also be applicable to paediatric care.

Our course runs in a dedicated simulation centre, which provides separate simulation spaces with adjoining debriefing rooms. Key features of the NPELC course are realism and immersion and, therefore, the course uses professional actors to take on the role of a range of parents within the different scenarios. This makes the simulations significantly more realistic. To add to the fidelity, LifeCast manikins are used in each scenario.¹ These manikins not only have an incredibly life-like appearance but are also weighted to handle like real-life infants (FIGURE 1).

The NPELC course is facilitated by a multiprofessional faculty with extensive palliative, bereavement and simulation experience (FIGURE 2). The faculty are able to guide the group debriefs and discussions and provide 1:1 feedback and support to each participant.



FIGURE 1 The LifeCast manikins used during the NPELC course.



FIGURE 2 Members of the NPELC faculty. From left: Tom Hogan, Jennifer Peterson, Sunaya Hirani, Clare Robinson, Helen Millar, Cath Rylance, Michelle Parr and Edward Gasiorowski.

Why has NPELC been developed?

Palliative and end of life care can be a highly emotional and intimidating situation for paediatric, perinatal and neonatal healthcare professionals. Given the sensitive nature of these situations there are often limited real-world opportunities for staff to develop their skills in the practical, emotional, spiritual and communication aspects of palliative and end of life care. However, it is essential that staff are given opportunities to develop this detailed subject knowledge, not only about the practical aspects – including the ability to recognise the difference between palliative versus end of life care – but also the necessary communication skills to be able to deliver information and discuss options in a caring and collaborative manner with parents. The quality of delivered care in this sphere has a life-long impact on parents and families and there is emerging evidence that good quality palliative

Unexpected term death in the delivery room
Broaching reorientation of care
Transfer to bereavement suite
Compassionate extubation
Medical cause for death certificate workshop
Perivable delivery
Complex abnormalities in antenatal clinic
Deterioration during therapeutic hypothermia
Twin memory making
Bereavement clinic

TABLE 1 Scenario topics included in the NPELC course.

and bereavement care is associated with reduced mental health burden on parents.^{2,3} The NPELC course provides a supportive environment for staff to have dedicated time to develop and practise these skills (FIGURE 3).

Parent speakers

NPELC is strengthened by involvement of parents who have kindly agreed to share their experiences through interactive whole group sessions during the course. We have worked alongside a range of parent speakers who have shared their personal experiences of loss in different circumstances: at the extremes of prematurity, loss on the neonatal unit and stillbirth at term. These discussion sessions illustrate the difference high quality palliative and end of life care can make. The parents involved in these sessions have all encouraged participants to ask questions and to discuss effective communication methods and ways to improve. The sessions are powerful and give cause for deep reflection for participants, as well as practical examples to enhance communication techniques.

Psychological safety

The content of the NPELC course is highly emotive and this type of simulation, while rewarding, can also be stressful for participants. Our team are aware that some participants attending the course will have had their own experiences of pregnancy and infant loss. Previous participants in this position have expressed apprehension about attending in case their own emotive experiences are triggered during the course. All participants have access to a range of support options. They can contact the course lead prior to, or at any time during the course, to notify them of any specific scenarios they may not want to participate in. We also ensure that the simulation centre where the course is run has extra



FIGURE 3 Photos from the extremely preterm delivery and twin memory making scenarios.



FIGURE 4 The 'word cloud' generated from participant feedback.

rooms available that can provide a private space if needed. Additionally, a vital component of this course is that the NPELC faculty include counsellors from the neonatal unit. The counsellors can provide 1:1 support where needed alongside facilitating whole group grounding and reflection exercises throughout the course.

Who can attend?

The NPELC approach is multi-professional and interdisciplinary, encouraging participation from neonatal doctors, advanced

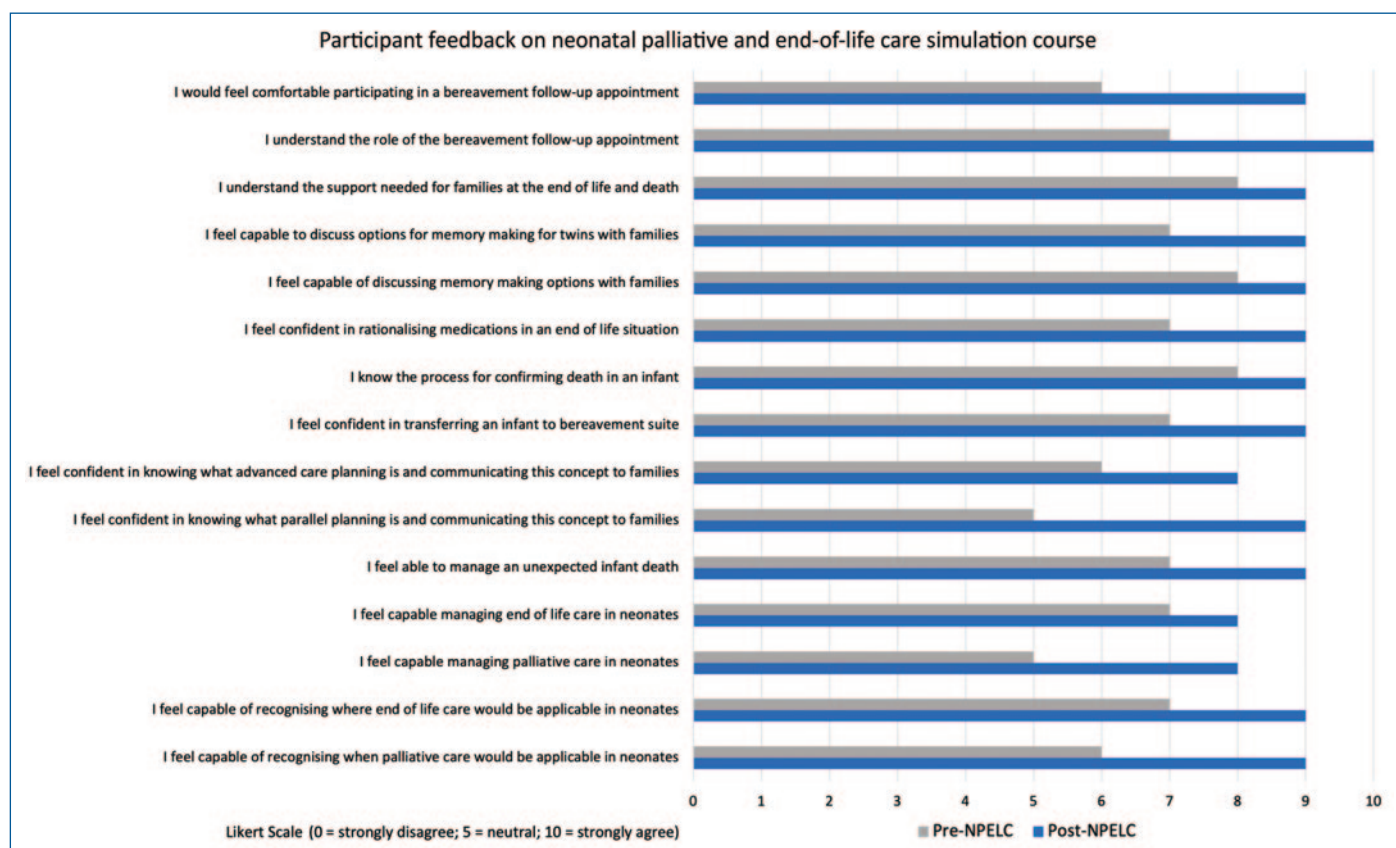


FIGURE 5 Participant self-rated confidence across key knowledge domains pre- and post-course.

neonatal nurse practitioners (ANNPs), nurses and midwives. We hope to expand the course to include obstetric teams in the future. Each course takes 12-16 participants in total (six doctors/ANNPs, six neonatal nurses and up to four midwives). The NPELC course is best suited to healthcare professionals who have pre-existing clinical experience working within maternity and neonatal care, such as consultants, paediatric and neonatal trainees working at ST5 and above, and senior nursing and midwifery staff. This ensures that participants will already be familiar with the clinical aspects of the scenarios, allowing them to focus fully on the palliative and end of life care skills that are the core of this unique course.

How do previous participants rate the NPELC course?

The course has been running since November 2020, receiving excellent feedback each time. Participants all report that attending the course was worthwhile and 100% would recommend it to colleagues. Participants appreciated the breadth of scenarios that were included covering palliative and end of life care not only within the neonatal unit, but also on the delivery suite and in antenatal clinic and bereavement follow-up appointments. Participants appreciated the experience of the faculty and the chance to learn from observing other participants' approaches to communication strategies and helpful phrasings. **FIGURE 4** shows the 'word cloud' created from written participant feedback across the three NPELC courses to date.

Pre- and post-course participants are asked to rate their confidence in their own abilities across key palliative and end of life care knowledge domains. These domains include recognition of infants with palliative care needs, facilitating memory making, advanced care and parallel planning concepts, how to rationalise medications during end of life care and the process to confirm death of the infant. Participant confidence increased significantly across all knowledge domains (p values <0.001 for every domain) after attending the NPELC course (**FIGURE 5**).

How can I attend?

Our course runs 2-3 times per year with the next date in planning for April 2023 at Whiston Hospital. For further details about attending and future dates please contact leanne.beaumont@mft.nhs.uk or jennifer.peterson@mft.nhs.uk.

Final thoughts

Simulation is an excellent methodology for healthcare professionals to develop their skills in providing palliative and end of life care. Our team are experienced, enthusiastic and extremely approachable. The NPELC course creates a safe learning space to develop skills for a vital, but challenging, aspect of neonatal care. Simulation is an immersive training method with great potential to improve the quality of palliative and bereavement care delivered to infants and their families. We hope you will consider coming and joining us on a course soon.

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