

CHILD CARE

'SA needs shift in neonatal care so that every infant has best start in life' – UP

STAFF REPORTER

"Neonatal care is no longer just about ensuring survival – it's about giving every infant the best possible start in life," said Professor Carin Maree, a senior lecturer in the Department of Nursing Science at the University of Pretoria (UP), during her recent inaugural address, titled 'Moving the goal post for the care of neonates for a better future'.

During the lecture, which was delivered at UP's Senate Hall, Maree emphasised the need for neonatal care to evolve and focus on nurturing pre-term and critically ill babies not only to survive, but to thrive.

She also reflected on her journey from paediatric nurse to neonatal care specialist, sharing how her expertise and passion for neonatal intensive care grew alongside an understanding that nature alone doesn't define a child's future. "We are who we are because of a combination of nature and nurture – we have limited control over nature, but we can strongly influence nurture," she said.

"Neonates are not miniature objects in a quest for survival," Maree added. "They are human beings with a past, a present and a future."

This fundamental shift in perspective, which she has championed for more than two decades, highlights the importance of nurturing care in addition to medical interventions. She stressed that while healthcare traditionally focused on survival, it is equally crucial to consider the future cognitive, emotional and social development of these infants. This means that family involvement should be central and occur alongside medical interventions, as it is a vital component of improving the long-term health outcomes of pre-term infants.



NEONATAL is about giving every infant the best possible start in life, says Professor Carin Maree.

"Mothers are much more than breastmilk providers and fathers need to be involved in the care of their babies," Prof Maree said. "Inter-professional teamwork is also necessary to improve health outcomes."

A significant part of her address focused on developmental care, a model that optimises growth and development during the critical phases of a neonate's life. Developmental care balances periods of stress and growth, offering care that mimics the conditions of the womb to reduce negative stimuli, such as bright lights and noise, while promoting positive stimuli like skin-to-skin contact. "As

human beings, we need both periods of stress and periods of growth and repair, and developmental care is a balancing act between the two," Maree said, emphasising that this approach has been shown to improve resilience, emotional bonding and brain development.

She explained that after birth, pre-term infants often lose the natural protection provided by the womb and placenta, and are suddenly exposed to the harsh realities of external stimuli.

"During the golden hour after birth, a baby's brain is exceptionally receptive to stimuli," she explained.

She cited research by Nils Bergman

on the importance of replacing stress hormones with oxytocin through positive stimuli such as immediate skin-to-skin contact. This contact, according to Prof Maree, not only contributes to healthy brain development but also strengthens attachment, which is vital for long-term emotional and social stability. She went on to highlight the importance of the early bond between infants and their parents.

"Babies tend to attach to the person who provides positive experiences, safety and security. For most infants, this person is the mother, but it could also be a father or another caregiver."

Maree stressed that healthcare

providers should avoid becoming the primary source of this attachment, as it is the role of the parents to establish this lifelong connection.

On the practical implementation of developmental care in South Africa, she referred to her extensive research and work in education where she introduced developmental care interventions in the neonatal nursing curriculum for undergraduate and postgraduate students, with notable success.

"We implemented developmental care in the neonatal intensive-care unit of Steve Biko Academic Hospital," Maree explained, describing how the initiative was rolled out by focusing on one principle at a time, introducing training and standard operating procedures, and changing the environment to align with developmental care guidelines.

She drew from studies that showed a significant reduction in stress levels among pre-term infants when developmental care principles were applied.

Maree also shared research findings from her own PhD, which focused on developing a model for training neonatal nurses as reflective practitioners and lifelong learners. This, she said, is key to maintaining competent and compassionate care in neonatal intensive-care units. Throughout her career, Maree has supervised and mentored several doctoral and master's students, contributing to the growth of research in neonatal care. Several of her students' studies have made significant contributions to the field.

Reflecting on her journey, she called on healthcare professionals, parents and policymakers to embrace a more holistic and nurturing approach to pave the way for a better future for South Africa's smallest and most vulnerable citizens.