## INTENSIVE CARE NURSE LINDA NILSSON

At Skåne University Hospital in Lund, one of Sweden's neonatal intensive care units provides care for the most fragile and vulnerable patients, preterm born babies. Here, intensive care nurse Linda Nilsson has dedicated the past 20 years of her career.

At the neonatal unit in Lund, infants are admitted as early as week 22 of pregnancy, and the level of care they require varies individually. Some need extensive support, while others require less. What all parents can expect, however, is a long journey, one where complications may arise along the way.

 We encourage parents to spend as much time as possible with their child and to be involved in the care, says Linda.

In the first days, blood samples are taken several times a day to determine the type of treatment the baby needs. A catheter is often placed in the umbilical cord to collect blood, but as the baby grows older and more stable, "standard" blood draws are preferred since catheters carry a certain risk of infection.

– When we evaluate respiratory support, we generally need to take blood samples 4-6 times per day. For newborn preterm babies, we take samples at least twice a day on average, Linda explains.

Every time a sample is taken, two people care for the baby. One nurse performs the procedure, while either a parent or a staff member supports the baby by holding and comforting them with a bit of sugar or a pacifier.

– We try to ease the experience as much as possible, but of course the needle hurts. Very small blood vessels can also be tricky to find. If the procedure becomes prolonged, we often see that the babies get tired afterward, and may experience drops in heart rate and oxygen saturation, she says. It was once believed that small babies did not experience pain in the same way as older children or adults. Today, we know that is not the case. In fact, studies show that some children may even develop hypersensitivity to pain later in life if they are exposed to repeated painful procedures early on.

 We do our best to plan care in a way that minimizes painful procedures for the baby. But if we had another way to enable better monitoring, we could potentially reduce the need for things like blood sampling, says Linda.

In Lund, two babies typically share a room. All preterm born babies are placed in incubators, and some require a ventilator or other forms of respiratory support. In preterm born babies, the alveoli, the tiny air sacs in the lungs, are often underdeveloped, making it difficult for them to breathe on their own. Once the lungs have matured, which can take several weeks, treatment can be reduced. At that point, the baby may only need supplemental oxygen delivered through small nasal prongs. X-rays are also taken as needed, depending on the baby's condition. For newborns, this can range from every other day to once a week.

But the condition of preterm born babies can change rapidly, from being relatively stable to becoming critically ill in a short time. If there's one thing Linda wishes for, it's the ability to continuously monitor what is happening inside the baby's body, particularly when it comes to ventilation and circulation.

 Of course, that kind of insight would help us intervene in time to help the baby.

Despite all the challenges and stress, Linda says she wouldn't want to do anything else.

– The reward is the feeling that we can truly help both the babies and their parents. They're in an incredibly vulnerable situation that they can't control, but we can do something meaningful for them while they're here with us.

