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NICU Reflections

1. NICU Training Scenario: Cincinnati Children's
    - Scenario 1 – In this Scenario a group of nurses are talking about a happy time in a fellow nurse's life. Everyone is happy and laughing, but what they fail to realize is that they are right outside of a pt room, where mom is feeling the complete opposite. The parents are in a sensitive state and when hearing these conversations, it makes the parent feel as if their child is less of a priority. I think that knowing when and where to have these conversations should be considered before having them.
    - Scenario 2 – In this scenario, again the nurses are gathering right outside of the pts room and having a conversation that involves "how bad of a day they had today". Not only is this unprofessional, it makes the pt and the family feel undermined and insignificant. Regardless of how one's day is going, we should never try and convey that message to the parents. The job is going to be difficult at times, but it is our job to set the pt and the family's mind at ease.
    - Scenario 3 - In this video a nurse asks another nurse to cover her while she goes to lunch. The other nurse agrees, and they both go about their business. What failed to happen was a detailed hand-off of the pt. There was minimal communication between the two nurses and it left the pt in jeopardy. The pt's parents are also left to wonder who is taking care of their kid, and how they are getting taken care of. There needs to be a more detailed report between the nurses and there needs to be a nurse present when the parent is there with questions.
    - Scenario 4 – In this video the pt's parents are calling to get an update on their child. The nurse gives the most vague response to them and they don't really get the information that they were calling about. The second time they call back the nurse gives a full detail description of how the child is doing and how they are treating the pt. Judging from the parents reaction they were appreciative of knowing intricate details on how the pt was getting treated and how they were tolerating it

2.
    - Tour of the NICU - This Nurse is touring us through their level 4 NICU. It is connecting to a local birthing center that makes transportation of the baby quicker and keeps the family under the same roof. As soon as you walk in there is a large handwashing station that has rotating colors to ensure that you are washing your hands in an appropriate time. In each room there are special lights that light up when there is too much noise that could affect the baby. The floors, ceiling and doors are also designed to do the same thing. There is a pullout couch for the parents so they can comfortably sleep in the room with the baby, and also a special chair designed for the post-partum mom. They also provide medical grade breast pumps in the room. The NICU also has a dining and kitchen area for all the families at the NICU. They can cook meals and socialize with other families in the same situation. They also have a family laundry room for lengthy

stays at the NICU. This NICU also provides a small number of parent stay rooms with what looks like a queen-size bed and a shower specifically for the parent. There are also private pump rooms for moms that don't want to do that in the room. They also have a full milk kitchen and properly store it for redistribution as well as lactation support teams for the pts.

- Equipment –
    i. Isolete – Incubator – This helps keep the baby warm after birth. These pts are prone to losing heat fast and this machine helps maintain a good healthy body temperature.
    ii. Scale – throughout the stay in the NICU the pts are regularly weighed on the scale. One of the requirements for them to leave is to continue to grow.
    iii. Breast milk pumps – mothers are encouraged to breast feed their children. These hospital grade pumps help get all the milk from the mother as it can and the facility has the proper storage mechanisms for the milk.
    iv. Transilluminator - it is a tube with a light at the end. It is used to highlight veins to make blood draws easier.
    v. Warming tables – radiant heat is given to the baby and temperature is determined from the skin temperature of the baby.
    vi. Ventilator – this machine helps the baby breath while intubated. The Dr. mentioned that medication is also given through this. – surfactant
    vii. Phototherapy- they use this when the babies bilirubin is too high, they refer to this as being jaundice. The CPAP is an apparatus that provides continuous positive airway pressure
    viii. Monitor- monitors the babies heart rate, oxygen levels, and the respiratory rate. The monitor does alarm, but check the baby and make sure that they are pink. The monitor at the bottom of the screen another pts vitals, because more often than not the nurse will be taking care of more than one pt.
- Admission to the NICU
    i. Make sure that the "giraffe" is clean and turn it on.
    ii. Step on canopy release to open it and make sure it is hot
    iii. Attach the temperature probe
    iv. Take two clean blankets and set on mattress
    v. Place a bad on the blankets
    vi. Choose the appropriate BP cuff according to the pt
    vii. Get a pulse ox and leads
    viii. You will need a tape measure
    ix. You will need a thermometer - don't leave in bed, it will over heat
    x. You will need a bulb suction
    xi. We need something to secure the temp probe
    xii. Secure leads and pulse ox to the monitor
    xiii. Green to red, white to white, and black to black
    xiv. Now close the bed canopy

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xv. You will need a syringe pump and an IV pump for drugs
xvi. Need to have emergency equipment available – bag and mask, and a wall suction - will need an appropriate size stethoscope
xvii. Undress baby and weigh
xviii. Measure the head circumference and the length
xix. Attach leads and pulse ox for complete set of vitals
xx. White- right upper chest, Black Left upper chest, Green- on the side
xxi. Pulse ox goes on the right wrist
xxii. Place BP cuff on the baby – calf or arm
xxiii. Take the babies temperature – axillary
xxiv. Apply skin temperature probe on baby - this will connect to the bed and adjust the temperature accordingly – adjust settings accordingly
xxv. Obtain a BS on the baby
xxvi. Call the physician – Newborn Delivery Record – New Born Admission Orders
xxvii. Get an IV cart
xxviii. Other paperwork – Ballard Scale – (Maturational Assessment of Gestational Age)
xxix. SBAR for report – also for the charge nurse
xxx. CPQC worksheet as well
xxxi. NICE admission checklist should be done within the fist hour of the baby being admitted

3. **Discuss medication safety in this patient population. What are the considerations for safe medication administration to this vulnerable population?**

- A medication dosage that is calculated incorrectly so that a pediatric patient receives too much medication may cause serious harm and even death.
- Miscalculation that results in too low of a dose may mean that a therapeutic level is not achieved or maintained.
- Errors in calculation are more dangerous in pediatric patients because their age, height, weight, and overall physiological condition may alter their ability to absorb, digest, metabolize, or excrete the medication.
- Nurses who work with pediatric patients must be able to calculate whether the ordered dose is within safe parameters as published by the manufacturer.
- If the manufacturer does not specify a pediatric dosage, the nurse must be able to calculate a pediatric dosage from an adult dosage.
- Many health care facilities and agencies have additional policies to guide pediatric medication administration specific to the facility

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4. **Review: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5856604/ : Parent Participation in the Neonatal Intensive Care Unit: Predictors and Relationships to Neurobehavior and Developmental Outcomes. Reflect on social situations seen in the NICU and differences in parent involvement in the NICU. Provide a discussion/reflection on both.**

There were some social demographics that played a part in how many times the parent held the child in the NICU. The categories were divided into Caucasian and Non-Caucasian. More parent presence was observed among mothers who were Caucasian, married, older, or employed and among those who had fewer children, familial support and provided breast milk. Having family support throughout this time is vital.

The article went on to discuss the stressors that the NICU child has to go through. From the loud noises in the room, to waking the child up for procedures, to actually performing the procedures. These stressors were associated with negative effects on the child's vital signs and was seen to keep the child in the NICU longer.

There was also a section that discussed the stressors that the parents feel when dealing with a child in the NICU. From finding time to go there, to work schedules, to the mental anguish they feel – knowing that their child is not in perfect condition. I am a parent of three girls, and one of the hardest things that I'm dealing with in life, is dealing (mentally) with my child not being 100%. It takes a strong parent to deal with that in a positive way.

There was an overwhelming amount of support for parent holding with the NICU child and the positive effects it has (long term) on the development of the baby.

1) More holding was observed in infants with fewer medical interventions.
2) More holding was related to better reflex development at term age.
3) More holding was related to less asymmetry at term and better gross motor development

5. **Explain how the nurse and unit alters the environment to reduce infant stimuli and promote health for the NICU baby.**
    - From the introduction to the NICU video I learned that there are a few ways to reduce stimuli from the environment
        i. There are lights in the room that emit light and blink when the noise (volume) from people's voices gets too loud.
        ii. The floor, ceilings, and doors are all made to reduce the amount of noise from getting to the baby.
        iii. The nurse has the right to ask anyone to lower their tone – volume or ask them to leave the room

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6. **What are the criteria for discharge from the NICU from the caregiver's perspective?**
    - Make sure that there is Insurance coverage for the child – family
    - Make sure they have a pediatrician and make follow up appointment
    - Identify appropriate specialist for the infant's diagnosis and made appointments
    - Give hands on teaching regarding specific diagnoses
    - Complete the discharge teaching

7. **What are the criteria for discharge from the NICU from a parent's perspective?**
    - Get your home ready for your preemie
        i. Diapers and wipes
        ii. Bottles
        iii. Clothing that fits
        iv. Swaddle blankets and/or sleep sacks
        v. Somewhere to sleep
        vi. Formula
        vii. Baby thermometer
        viii. Bathtub
        ix. Nasal aspirator
        x. Hand sanitizer
        xi. Medication syringe
        xii. Baby monitor
        xiii. Baby swing
        xiv. Sling, wrap, or skin-to-skin shirt
        xv. Hands-free pumping bra
        xvi. Baby mobile
    - Get yourself ready to bring baby home
    - Get your support team ready to help

8. **What do you think are some of the challenges of being a NICU nurse? What are some of the most rewarding things about being a NICU nurse? Review these videos and reflect on what you saw in the first video (training scenarios) also. Be prepared to discuss your thoughts.**

    I think that being a NICU nurse would be extremely challenging and rewarding at the same time. I am a very emotional man with three baby girls, and I'm trying to be as strong as I can for them, and they aren't even sick.

    The challenges they face are - having to deal with the sick children and their families. It is a high stress job and there is a lot at stake. I think that dealing with the people that can communicate is probably the hardest part. I would want to explain everything in extreme detail so that way I could try to lessen their anxiety. That task is probably a lot easier said than done.

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The most rewarding part of the job is being able to help this child out of the NICU. In the video you see the amount of joy from both the nurse and the parent when the child is getting discharged from the unit. As a nurse, I'm sure there is a big sense of pride when one of your pts goes home with his/her parents. Knowing that you did everything right to help that family become whole has to be a great feeling.