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Quality Improvement

Quality Improvement Activity: Newborn transition A 17-year-old new mother delivered her baby vaginally around 0500. She was transferred to the postpartum floor around 0730. The nurse does a full admission assessment on both the mother and the newborn. The baby's temperature was at 98.2℃ on admission. The primary nurse is a middle aged woman who has been a postpartum nurse for 30 years. According to her coworkers, she has been extremely burnt out for a few years and has not been as passionate about her career than she was before. Because of this, she sometimes starts to become lenient in her daily tasks. Since her patient is a new mother, she is not aware that she is supposed to keep her child as warm as she can by either swaddling or skin to skin. The primary nurse did not educate her on the importance of a warm newborn when they are in this transition period and the risk for cold stress. The nurse would go round on her patient but would not do a proper assessment or vitals at the right time, so therefore she was not taking temperatures on the newborn despite seeing that the baby was not swaddled in the crib. She assumed that the baby was already warm since she rarely had to deal with cold babies. Around 1400, the mother pulls the call light off the wall, panicking that her baby is blue. NICU was called and they rushed the baby to the nursery. While there, the baby's temperature is taken and the result is 35℃ and the team determined that the baby was in cold stress. They kept the newborn under the warmer for a couple of hours with oxygen until 1630. The baby ended up doing well and remained warm for the remainder of their stay.

Describe the scenario: In what way did the patient care or environmental lack? Is this a common occurrence?
The patient care lacked severely when the nurse did not take the temperatures when she was supposed to. On our floor, we are supposed to educate the parents about keeping the baby as warm as possible and what could happen if the newborn happens to get too cold. I feel like this could be a common occurrence in nurses who have had this career for a very long period of time. It could also be an occurrence if one of the nurses is having a bad day. Of course those are inevitable however, that is when help should be asked for from coworkers to fully care for these patients. This nurse should have done full assessments and rounding every 2 hours if not, sooner.

What circumstances led to the occurrence?
This occurrence happened because of the burnt out nurse. The newborn transition is so crucial because a lot of things can potentially go wrong in the first couple of days. The main thing was that the nurse did not properly check the temperature of this newborn.

In what way could you measure the frequency of the occurrence?
The best way in this case is to interview other nurses on how often and how common a low temperature can be in a newborn. Looking at charts of different newborns and seeing how well their health is. For example, if the newborn was born with an infection or was premature, we would know that temperatures must be taken every 4 hours. Looking at the history of the mother

and seeing if there is a GBS infection or chorioamnionitis. These can also cause hypothermia in newborns. So with that information as well, we would know to check those temperatures every 4 hours. Therefore, looking into the mother and the baby's health is crucial for the prevention of a cold temperature.

What evidence-based ideas do you have for implementing interventions to address the problem?

For starters, education is the best way to prevent this from happening. Especially with new mothers. They are certainly not expected to know the importance of a warm newborn so it is up to healthcare workers to inform them. They should be educated that every degree their baby drops, their mortality increases by 10%. Inform them that this is because newborns cannot regulate their temperatures. Especially if they are small for gestational age, premature, coming from a diabetic mother or the newborn has an infection. Ways we can teach them is by telling them that they must stay swaddled with 2 baby blankets. If they are not swaddled, they can do skin to skin with either mom or dad. That is a guaranteed way for the baby to get warm. If that does not help, let the parents know that the newborns will warm up under a radiant warmer in the nursery. A lot of first time parents would love to show off the newborns new outfits and do not want to swaddle the baby. If that were to happen, we can educate the family on turning up the heat in the room and to not keep them free from a swaddle for a long period of time. I would go as far as having a baby thermometer provided or having the parents bring their own so that they can take their own child's temperature as many times as they want if they wish to do so. Postpartum nurses take these temperatures every 8 hours for a warm baby and every 4 hours for a cold baby. So if the parents have more peace of mind, teach them the normal temperature and what they can do to ensure warmth. With that, education is key for prevention. Mandatory meetings for nurses every month could also make a huge difference. In this case, this burnt out nurse did not feel the need to do a proper assessment, so if more strict education is put into place, the older nurses would be reminded about the importance as well. I personally feel like we should be checking the baby's temperature more frequently anyway instead of every 8 hours.

How will you measure the efficacy of the interventions?

The best way to do this is by knowing the parents understand the prevention of a cold baby and the newborn transition overall. Taking temperatures more often so we can catch early hypothermia. The wanted to temperature is 97℉ and greater or 35.5℃ and greater. If taking temperatures more often is put into place, discovering a trend of declining temperature is easier. Initiation of skin to skin and/or placing under the radiant warmer would be done quicker to assure the baby does not get too cold. More rounding and more education overall would be the best way to measure the efficacy.