

**Implementing Trauma Informed Care Training to Improve Interaction Between Nursing
Students and Parents of Babies with Neonatal Abstinence Syndrome.**

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For my senior honors project I have researched how education on trauma-informed care impacts the family experiencing neonatal abstinence syndrome and how education can be given on how to have a trauma-informed approach. I researched the implementation of trauma-informed care in the Neonatal Intensive Care Unit (NICU) setting and then developed training that was presented to volunteers at a local NICU facility. The Rock and Hold program through Cone Health allows nursing students who have completed one semester of clinical to volunteer in the NICU. Responsibilities of the volunteer include assisting the nursing staff by feeding, soothing, rocking, reading, and changing diapers. This is particularly important with babies who have Neonatal Abstinence Syndrome (NAS) and require extra attention. Babies who have NAS experience periods of withdrawals in which the child may have periods of inconsolable crying. NAS babies mustn't be overstimulated because this can be a stressor for the baby as they are hyperresponsive to stimuli. There is limited exploration of how trauma-informed care specifically impacts families affected by neonatal abstinence syndrome in the NICU setting. This project specifically explores how we can train NICU volunteers, who are soon-to-be nurses to implement trauma-informed care into their approach to care for patients. This not only invests in bettering patient volunteer interactions but also in future patient encounters these students will have throughout clinical experiences and nursing careers.

What is trauma informed care?

Trauma informed care [TIC} is when we recognize that the patient has experienced trauma that we are unaware of as healthcare providers. The patient's prior traumatic experiences, especially when experienced in repetition, have impacts on their health (Centers for Health Care Strategies Center, 2019). Applying TIC leads the provider to look at the whole patient, not just a singular point in their medical history. It is important that all healthcare member interacting with

the patient but also all other staff that play a role in the patient experience such as environmental and food service personnel participate in TIC. Helping the patient to feel that they are in a safe environment and establishing trust is important in TIC. It is important that open ended questions are asked when addressing the patient. It is also important to change the mind set of “What is wrong with the patient to what has happened to this patient?” (Centers for Health Care Strategies Center, 2019).

Adverse childhood experiences, or ACES, and trauma informed care go hand in hand because people with ACES have experienced trauma. When healthcare providers do not understand or appreciate the impact of ACES and previously experienced traumas, they may not work effectively in communicating or comprehending the patients needs, which can cause re-traumatization (Marcellus, 2014). Patients with high ACES scores need to be cared for using a TIC so that we do not damage rapport with the patient and their experience in a healthcare setting.

The importance of TIC in the NICU

It is important for us to realize that the NICU is a place that can be traumatic for NICU families and babies, especially those with Neonatal Abstinence Syndrome (NAS). According to Jaekel and colleagues (2021), there are hardships outside of the NICU such as social and economic burdens experience by families affected by NAS that can affect health and access to care. “ These social determinants impact the whole family and can impact a patient’s ACES score. ACES can be taken into consideration with the newborn and the parents. Healthcare providers working with parents who used substances during the perinatal timeframe may hold negative biases that affect their attitudes and care leading to a less supportive environment for these families (Marcellus, 2014). We can use TIC to ensure that we are not carrying these types

of bias about patients and their families. Biases effect how we care for patients, and TIC can help address these biases. It is important while working with patients who have experienced trauma to understand that it is impossible to know their whole story and their experiences have impacted them. Providing training on TIC to nursing students volunteering in the NICU is important because this helps develop a standard for how they can incorporate TIC for the NICU family that is experiencing a crisis that we cannot fully understand and for future patient encounters to better the patient experience in health care. The NICU is a traumatic environment; no family expecting a child anticipates their baby being in the NICU. The NICU can be a scary place not only for parents but for the child with NAS as well. Making sure procedures are being upheld by the volunteers such as dim lights, a quiet voice, the correct posture to hold the baby and responding and recognizing cues that the baby is overstimulated.

Implementation of TIC in NICU Settings and Outcomes

Valuable information included by others in their trauma informed care training, comes from SAMHSA, (The Substance Abuse and Mental Health Services). Using this information from SAMSHA, Marcellus and Cross (2016) outline a process of realizing, recognizing responding and resisting. The CDC has also adopted 6 guiding principles from SAMHSA to help healthcare workers to have a trauma informed approach, they include “Safety, trustworthy and transparency, peer support, collaboration and mutuality, empowerment and choice, cultural, historical and gender issues” (CDC,2022).

A study by Linn et al. (2021) (used online training for interdisciplinary NICU team members, which focused on trauma and it’s impacts, recognition of trauma, and implementation strategies. Ensuring safety, empowerment, collaboration between the healthcare team and families, and building trust were included as strategies to implement TIC (Linn et al., 2021). In

this study, the average length of stay decreased significantly after staff TIC training and education for mothers on NAS, and a survey of staff revealed the majority of staff reported using TIC principles in their care (Linn et al., 2021) A curriculum used by Schiff and colleagues (2017) similarly included principles of TIC and recognition of trauma but also included reflection on personal attitudes and establishing compassion. In their survey, they found that participants who received the training had higher levels of trust toward parents and more comfort recognizing and supporting families who've experienced trauma compared to prior to the training. This signals that those who underwent TIC education would had a shift in perspective of how they view mothers with SUD (Schiff et al., 2017)

Implementing TIC in the Rock and Hold Program

As TIC training improves healthcare provider attitudes towards parents in the NICU and improves patient outcomes (Linn et al., 2017; Schiff et al.), the purpose of this project was to create a training education on TIC for nursing students participating in the Rock and Hold volunteer program. This training was designed to better prepare them for anticipated interactions with NICU parents and to address any biases the nursing students may hold about parents of babies with NAS which will ultimately help them provide better care for their patient and the family. The full training module presentation is shown in Appendix A.

Setting

While Rock and Hold is for any baby in the NICU who needs extra attention, there tends to be a higher number of babies with NAS who receive assistance from Rock and Hold volunteers. It was crucial that the volunteers be made aware that women with substance use disorder (SUD) are at a higher risk of trauma due to ACES scores and social determinants of health. Prior to this training there were no resources for incorporating TIC into the NICU setting

at the Women and Children's Center. A barrier to incorporating TIC into the NICU setting is that it requires additional training of the staff and time required to research and create a training. Lack of time to create training or lack of knowledge of how a trauma informed approach benefits patients and their families in the NICU may lessen the motivation to incorporate these practices. This project serves to incorporate a trauma informed approach to NICU volunteers, inclusive to student nurses entering the rock and hold program and existing nannies and Mannies. Nannies and Mannies are long term volunteers in the NICU at Cone Health. Additionally, creation of this training module also provides for future opportunities for adaptation for the multidisciplinary team within the NICU, as a trauma informed approach is key to how we approach our NICU patients. This project specifically focuses on incorporating TIC into this NICU setting, but further research would need to be done on how maternal-child specialty could benefit from this sort of training.

Module Design

The training module consists of a PowerPoint to introduce why a TIC is important in the NICU setting for parents of babies experiencing Neonatal Abstinence Syndrome (NAS) and how volunteers can be trauma informed. The training includes videos as well as information learned through the studies that have been researched and incorporated into a PowerPoint. The current Rock and Hold PowerPoints were also updated to match and flow with the trauma informed care training. Merging the TIC and prior Rock and Hold PowerPoints were done for efficiency in training the volunteers as well as to help the volunteers visualize how they can weave a trauma informed approach directly into their care for NICU patients. Slides 17 through 32 provide information about trauma informed care and its importance in the NICU, with 17 through 26 focusing on background such as ACES, traumas experienced by families in the NICU and

impacted by NAS, and the principles of developing relationships with families. These slides can be found in Appendix A. Slides 27 through 32 provide specific training on implementations using the 4 Rs approach.

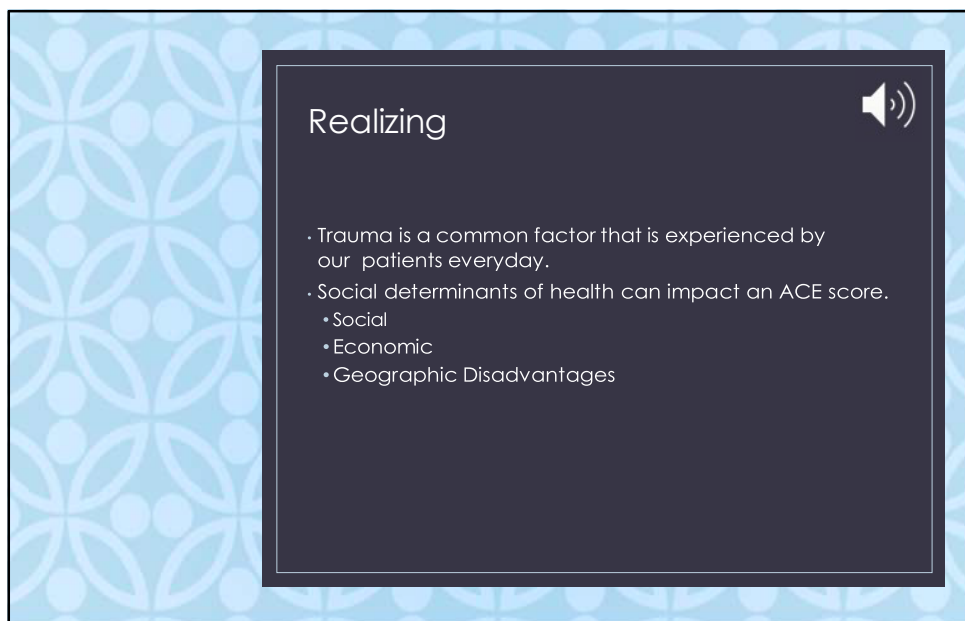
Incorporating the 4 R's

Using a training method that incorporates the four R's and six guiding principles used by the CDC helped provide information on what being trauma informed means. The four R's include realizing, recognizing, responding, and resisting retraumatization. These are essential to be able to provide trauma informed care in the Neonatal Intensive Care Unit. The 4 Rs were incorporated into the training module to educate volunteers.

The first R is realizing which means that we must realize that trauma is a common factor that is experienced by our patients every day. A study by Williams and others (2021) found that families in the NICU have a high prevalence of acute stress symptoms which is correlated with the adverse childhood experiences of the parents. When we are aware of how common ACES are and how the NICU heightens stress we can understand that trauma and stress are frequent occurrences in the NICU that should be handled by using a trauma informed approach. The trauma our patients experience is impacted by social determinants of health including social, economic, and geographic disadvantages, these factors also impact ACES. This was incorporated into slide 29 shown in Figure 1.

Figure 1

Realizing, Slide 29

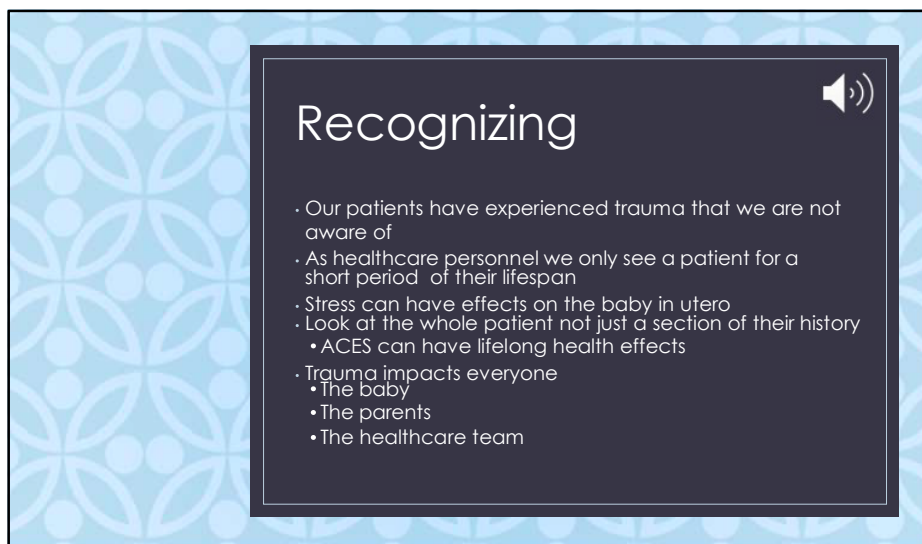


Note. Narration of this slide included the information presented along with emphasis that these factors impact health.

Recognizing is the second R in the CDC's guide to trauma-informed care. We must recognize that our patients have experienced trauma that we are not aware of because we only see a short glimpse of their life story. There have been studies that show that stress can impact babies in utero. It is important that we teach those who will interact with the patient to look at them as a whole, and not by just a section of their health history or label we have given them. This allows us to view our patients and their families from a trauma-informed lens by “allowing us to have a better understanding of the disturbing, confusing or upsetting behavior of others, by encouraging grace and curiosity instead of judgement and condemnation” (Hubbard et al., 2021 p.2). It is also important for us to recognize that trauma impacts the baby, the family and the healthcare team. This was incorporated into slide 30 shown in Figure 2.

Figure 2

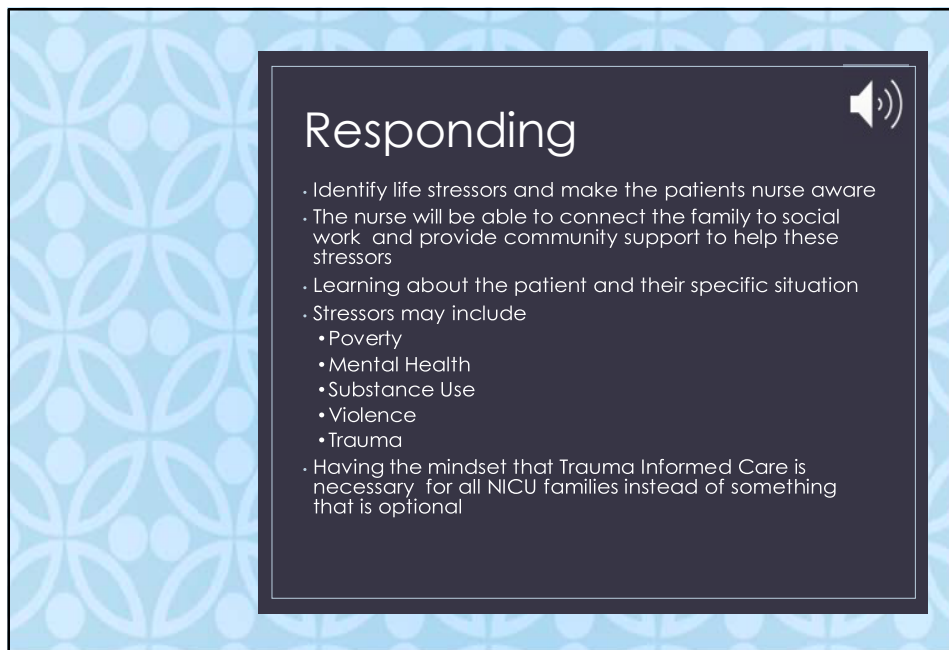
Recognizing, Slide 30



The third R is responding. The volunteers will be taught that if they identify any life stressors that are previously unknown to the healthcare team, they should notify the nurse so that the family will be able to get connected to the resources that they need such as social work and other community support to help out with these added stressors. Stressors that the volunteers could potentially identify include poverty, mental health, substance use, violence, and trauma. Another crucial part to responding is having the mindset that it is necessary for all families to be cared for with a trauma informed approach instead of something that is optional. Equipping these volunteers to use a trauma informed approach betters the quality of care for the entire family. This was incorporated into slide 31 shown in Figure 3.

Figure 3

Responding, Slide 31



Responding

- Identify life stressors and make the patients nurse aware
- The nurse will be able to connect the family to social work and provide community support to help these stressors
- Learning about the patient and their specific situation
- Stressors may include
 - Poverty
 - Mental Health
 - Substance Use
 - Violence
 - Trauma
- Having the mindset that Trauma Informed Care is necessary for all NICU families instead of something that is optional

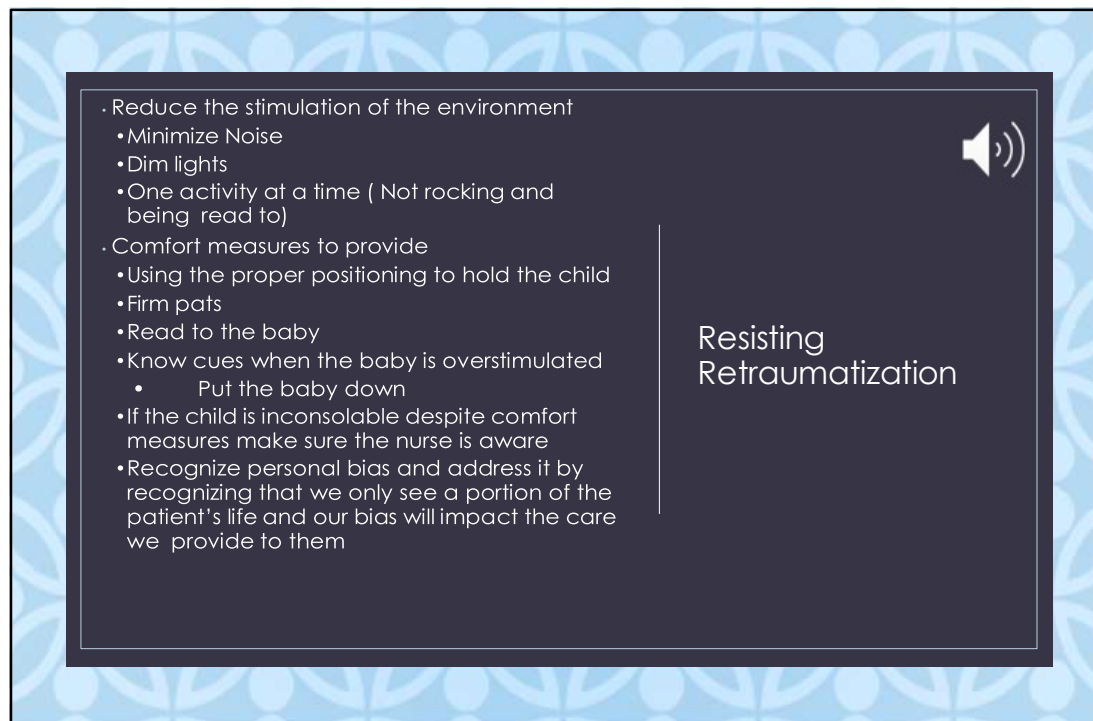
Note. Narration encourages volunteers to watch for stressors in all families and to ensure that the healthcare team is aware.

The fourth R is resisting retraumatization. Patients have mistrust in our healthcare system. This mistrust comes from injustice from systemic racism throughout history, cultural differences and negative personal experiences in the healthcare setting which may be impacted by implicit bias. Trauma-Informed care allows us to look at a situation to see how it is intensifying the stress our patients experience, allowing us to respond therapeutically (Torr, 2022). However, before we provide trauma informed care we need to understand our own implicit bias, because implicit bias unconsciously impacts the care we are able to provide to our patients. A study by Schiff and others (2017) found that hospital staff did not know how to respond to negative comments from other staff members about families experiencing NAS. When we begin to educate hospital staff about TIC we can help address biases held by healthcare staff, and properly educate them on making sure we are looking at the patient and their families as a

whole, and providing the best care for them no matter the circumstance. Specifically addressing retraumatization in the NICU can also be done through minimizing stimulation of the baby's environment. Through keeping noise at a minimum, dimming the lights, only doing one activity with the baby at a time (like singing or rocking). It is also important to know cues as to when the baby is over stimulated and respond to these cues. The NICU environment is much different than what the baby has experienced in utero and is not what the baby's family was expecting to encounter upon the arrival of their child. Being sensitive by how the healthcare setting threatens retraumatization to this population is a way we can prevent this trauma related to the NICU setting from happening. Slide 32, shown in figure 4.

Figure 4

Resisting Retraumatization, Slide 32



- Reduce the stimulation of the environment
 - Minimize Noise
 - Dim lights
 - One activity at a time (Not rocking and being read to)
- Comfort measures to provide
 - Using the proper positioning to hold the child
 - Firm pats
 - Read to the baby
 - Know cues when the baby is overstimulated
 - Put the baby down
 - If the child is inconsolable despite comfort measures make sure the nurse is aware
 - Recognize personal bias and address it by recognizing that we only see a portion of the patient's life and our bias will impact the care we provide to them

Resisting Retraumatization

Conclusion

The anticipated outcomes for implementing a trauma informed approach for NICU volunteers was to increase their confidence in providing therapeutic communication in the way they respond to their patients. In providing a trauma informed approach the intent was to build rapport with our patients and to change the way of thinking from what is wrong with this patient to what situations has this patient experienced to increase their stress and how can I help. Future pre and post surveys should be conducted to see how the volunteers feel about the care of mothers with SUD and babies experiencing NAS prior to the training and after completion of the training. The hope is that the volunteers felt more equipped and are confident in how to respond in a therapeutic manner. It is important to understand that trauma informed care should not be limited to volunteers in the NICU, instead future trainings should be adapted to be inclusive to all staff who will be at the bedside caring and interacting with the patients and their families in the NICU.

References

- Centers For Health Care Strategies. (2022, July 7). *What is trauma-informed care? - trauma-informed Care Implementation Resource Center*. What Is Trauma-Informed Care. Retrieved September 15, 2022, from <https://www.traumainformedcare.chcs.org/what-is-trauma-informed-care/>
- Hubbard, D. K., Davis, P., Willis, T., Raza, F., Carter, B. S., & Lantos, J. D. (2022). Trauma-informed care and ethics consultation in the NICU. *Seminars in Perinatology*, *46*(3), N.PAG. <https://doi.org/10.1016/j.semperi.2021.151527>
- Jaekel, J., Johnson, E. I., Reyes, L. M., Layton, K. N., & Harris, M. N. (2021). Conducting Research with Families of Infants Born with Neonatal Abstinence Syndrome: Recommendations from Rural Appalachia. *Social Work Research*, *45*(1), 63–68. <https://doi.org/10.1093/swr/svaa024>
- Linn, N., Stephens, K., Swanson-Biearman, B., Lewis, D., & Whiteman, K. (2021). Implementing Trauma-Informed Strategies for Mothers of Infants with Neonatal Abstinence Syndrome. *MCN: The American Journal of Maternal/Child Nursing*, *46*(4), 211–216. <https://doi.org/10.1097/NMC.0000000000000728>
- Marcellus, L. (2014). Supporting Women with Substance Use Issues: Trauma-Informed Care as a Foundation for Practice in the NICU. *Neonatal Network*, *33*(6), 307–314. <https://doi.org/10.1891/0730-0832.33.6.307>
- Marcellus, L., & Cross, S. (2016). Trauma-Informed Care in the NICU: Implications for Early Childhood Development. *Neonatal Network*, *35*(6), 359–366. <https://doi.org/10.1891/0730-0832.35.6.359>

Schiff, D. M., Zuckerman, B., Hutton, E., Genatossio, C., Michelson, C., & Bair-Merritt, M.

(2017). Development and Pilot Implementation of a Trauma-Informed Care Curriculum for Pediatric Residents. *Academic Pediatrics, 17*(7), 794–796.

<https://doi.org/10.1016/j.acap.2017.03.011>

Shaikhkhalil, A., Jump, C., & Goday, P. S. (2019). Development and Pilot Implementation of a

Nutrition Curriculum and Rotation in Pediatric Gastroenterology Fellowships. *Journal of Pediatric Gastroenterology & Nutrition, 68*(2), 278–281.

<https://doi.org/10.1097/MPG.0000000000002135>

Torr, C. (2022). Culturally competent care in the neonatal intensive care unit, strategies to address outcome disparities. *Journal of Perinatology, 42*(10), 1424–1427.

<https://doi.org/10.1038/s41372-022-01360-2>

Williams, A. B., Hendricks-Muñoz, K. D., Parlier-Ahmad, A. B., Griffin, S., Wallace, R., Perrin,

P. B., Rybarczyk, B., & Ward, A. (2021). Posttraumatic stress in NICU mothers:

modeling the roles of childhood trauma and infant health. *Journal of Perinatology, 41*(8),

2009–2018. <https://doi.org/10.1038/s41372-021-01103-9>

Wisdom, A. C., Govindu, M., Liu, S. J., Meyers, C. M., Mellerson, J. L., Gervin, D. W.,

DePadilla, L., & Holland, K. M. (2022). Adverse Childhood Experiences and Overdose:

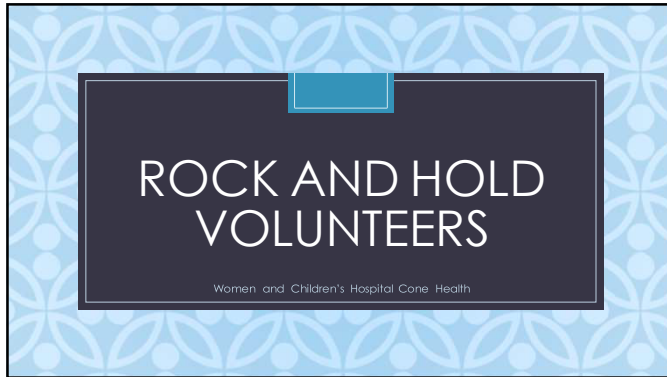
Lessons From Overdose Data to Action. *American Journal of Preventive Medicine,*

62(6), S40–S46. <https://doi.org/10.1016/j.amepre.2021.11.015>

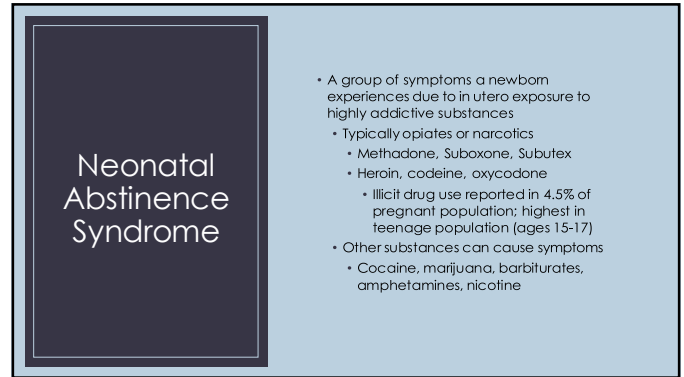
Wolkin, A., & Everett, A. (n.d.). *Using trauma-informed care to guide emergency preparedness and response*. Centers for Disease Control and Prevention. Retrieved September 3, 2022, from <https://blogs.cdc.gov/publichealthmatters/2018/07/trauma-care/>

Appendix A

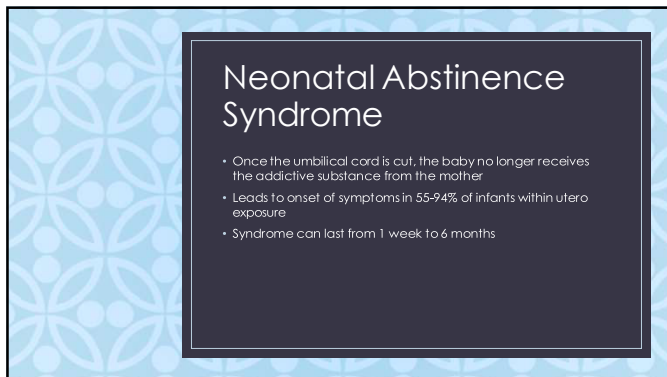
Presentation Slides



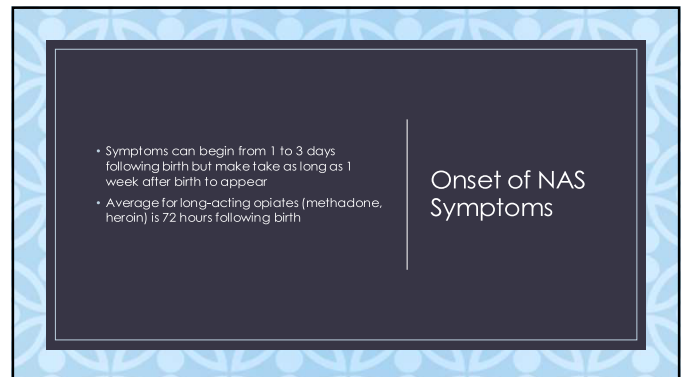
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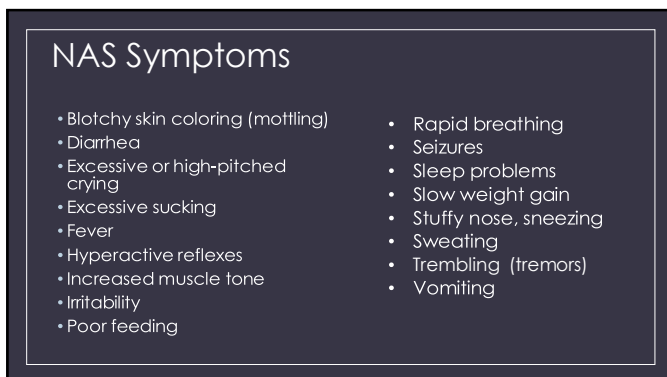
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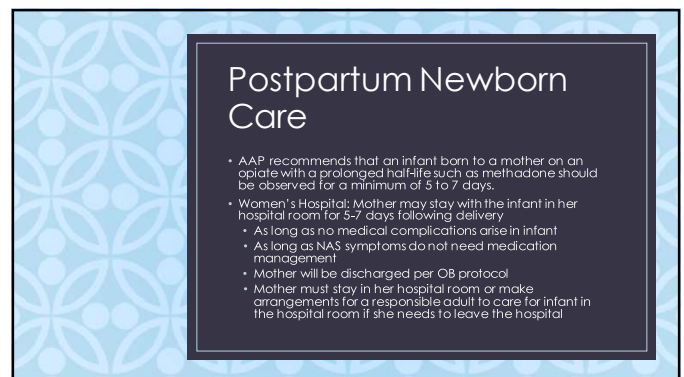
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4



5



6

Postpartum Newborn Care

- If unable to stay, the infant is transferred to the Newborn Nursery until 5-7 day observation is complete or medical management of NAS is required
- Mother can care for infant in newborn nursery as she is able
- Social work will meet with family to assess needs and resources
 - Discuss guidelines for maternal and infant toxicology screening with family
 - Assess social situation, provide support and initiate referrals as needed

7

Optimal Newborn Care

- minimize environmental stimuli (both light and sound)
- provide a dark, quiet environment
- careful swaddling to minimize over stimulation
- responding early to an infant's signals
- appropriate infant positioning and comforting techniques (swaying, rocking)
- provide frequent small volumes of hypercaloric formula or human milk to minimize hunger and allow for adequate growth

8

Eat, Sleep, Console

- Goal of management is to utilize non-pharmacologic therapy to minimize or eliminate the need for medications to manage NAS
- Eat-goal is for infant to eat 1 ounce or more every 3 hours
- Burping?
 - Always ask the baby's nurse
 - Some baby's need frequent burps but others this may totally disorganize or unhinge a baby
- Sleep-goal is for infant to sleep for 1 hour or more following feeding
- Console-goal is for infant to be consoled within 10 minutes of onset of crying

9

Feeding Strategies

- Swaddle
- Hold in a C-curve/crescent moon position, and close to your body
- Start with pacifier
- Be consistent with nipple flow rate choice – slow flow is often most appropriate considering how vigorous sucking pattern often is (frequently described as frantic) and baby's general disorganization

10

Keys to Success


- Follow Baby's Cues
 - Babies experiencing NAS have poor habituation and need us to react to their distress
- Achieving a Calm State
 - Including Calming the Feeder
- Positioning
 - Be Flexible
 - Containment is Key

11

Keys to Success

- Containment
- Holding tightly with deep pressure and close to body
- Gentle up and down rocking
- Deep pressure patting
- Low lighting

12



The baby faces away from you and its neck arches and down from head to toe.

STRONGER TOGETHER: NAS SOOTHING TECHNIQUES FOR MOMMIES AND BABIES

13

Differences with preterm infant

- Therapeutic tuck – just holding infant still within crib or isolette with pressure at top of head and with legs flexed
- Avoiding multi-modal stimulation – only offer one stimulation at a time, and limit it!
- How to tell when a baby is overwhelmed?
 - Stress signals include: extension like eyes; awing; sleep sign with hands or splayed fingers; pushing or kicking out; frequent sneezing, hiccup; yawns; sudden drop in muscle tone or change in shape; wide, startled gaze; averting eye gaze.

14

Preparing for Discharge

- Begin on day of delivery
- Importance of breastfeeding or providing expressed breast milk
 - Breastfeeding or the feeding of human milk has been associated with less severe NAS that presents later and less frequently requires pharmacologic intervention
 - Methadone and buprenorphine are present in very low concentrations in human milk
 - Provide a "natural" wean for NAS infants when consistently fed mother's milk
- Participating in infant care
 - Feeding
 - Bathing
 - Soothing
 - Medication administration

15

Following Discharge

- Pediatrician assumes routine care
 - Parents must select provider prior to discharge
 - Provider will receive a detailed summary of infant's hospital stay and post-discharge recommendations
- Home Health Nurse
 - Utilized if concerns for post-discharge care, medication management
- NICU Developmental Clinic
 - Infants with an NAS diagnosis will be followed around 6 months of age to assess developmental milestones
 - Developmental Pediatrician or Nurse practitioner
 - Nutrition
 - PT/OT, audiology
- CACI: Early Intervention Hub
- Family Support Network
 - Available throughout hospitalization and following discharge

16

CHALLENGES RELATED TO NAS AND NICU BABIES

A TRAUMA-INFORMED APPROACH

17

Adverse Childhood Experiences (ACES)

- Scores are increased by traumatic events that happen in someone's life
- ACES are associated with social determinates of health
 - Home environment
 - Financial instability
 - Inaccessibility to healthcare
- ACES scores make an individual more likely to develop Chronic health issues, Mental health problems, and substance use disorder.

18

Changing Our Mindset






"What is wrong with the patient? To "What has happened to the patient?"



Looking at the experiences of the patient and not just their responses or what we see only surface level.

19

Babies who have NAS and their parents



Parents with substance use disorder are more likely to have higher ACE scores

Social determinates impact ACES

The NICU can be traumatizing place for the infant and family

20

Safety



- Foster a safe environment
- Make sure that environment factors within our control are not overstimulating
- Be sure to make the parents feel safe
 - Speak to them and ask them how they are doing
 - Be there to listen to them
 - If they have any questions about their child, find the baby's nurse so that she can update them
 - " Let me go get your baby's nurse, and she will be able to tell you a little more about that"
 - Makes sure to follow through with finding the nurse to get updates for the family

21


Trustworthy and Transparency



- Build and establish trust with the baby, family, and other team members involved with the care
- If an infant is crying or cues that their needs are not met, respond by meeting their needs
- Build trusting relationships with the family and other team members

22


Peer Support



- The parents of the baby are trauma survivors, meaning they have experienced trauma together. They are key in helping with recovery and healing

23

Collaboration and Mutuality



- Having a trauma informed approach is not just for doctors, nurses, or neonatal nurse practitioners
- It is for everyone who will enter the patient's room
- Remember that anyone can be therapeutic

24

Empowerment and Choice

- The nurse partners with the family through goal setting and shared decision making to help the family
- Feeling safe and confident in your role will allow you to have a therapeutic relationship with the patients in the NICU

25

Cultural, Historical and Gender Issues

- Self acknowledge biases held about race, ethnicity, sexual orientation, age, religion, gender identity, and geography because this impacts our care for the client

26

How to implement Trauma Informed Care in the NICU

27

Four R's Approach

- Realizing
- Recognizing
- Responding
- Resisting

28

Realizing

- Trauma is a common factor that is experienced by our patients everyday
- Social determinants of health can impact an ACE score
 - Social
 - Economic
 - Geographic Disadvantages

29

Recognizing

- Our patients have experienced trauma that we are not aware of
- As healthcare personnel we only see a patient for a short period of their lifespan
- Stress can have effects on the baby in utero
- Look at the whole patient not just a section of their history
 - ACEs can have lifelong health effects
- Trauma impacts everyone
 - The baby
 - The parents
 - The healthcare team

30

Responding

- Identify life stressors and make the patients nurse aware
- The nurse will be able to connect the family to social work and provide community support to help these stressors
- Learning about the patient and their specific situation
- Stressors may include
 - Poverty
 - Mental Health
 - Substance Use
 - Violence
 - Trauma
- Having the mindset that Trauma Informed Care is necessary for all NICU families instead of something that is optional

31

Resisting Retraumatization

- Reduce the stimulation of the environment
 - Minimize Noise
 - Dim lights
 - One activity at a time (Not rocking and being read to)
- Comfort measures to provide
 - Using the proper positioning to hold the child
 - Firm pats
 - Read to the baby
 - Know cues when the baby is overstimulated
 - Put the baby down
- If the child is inconsolable despite comfort measures make sure the nurse is aware
- Recognize personal bias and address it by recognizing that we only see a portion of the patient's life and our bias will impact the care we provide to them


32

Calming the Baby with NAS

- 1 Reduce Rigidity
 - Use Pacifier
 - Swaddle
 - Provide Warmth
- 2 Decrease Stimulation
- 3 Introduce the bottle slowly
 - Be prepared for over enthusiasm or vigorous suck

33

The NICU Environment



- The NICU is a scary place for the baby and the parents
 - This can be overstimulating and can cause excess stress for the baby and the parents
- Interventions for Stimulants in the NICU
 - Dim lights
 - Quiet Voice
 - Correct posture when holding the infant
 - Recognize and respond to cues of over stimulation

34

Resources

- Women's Hospital Neonatal Abstinence Team
Neonatal Intensive Care Unit, 2nd Floor
1200 N Elm Street
Greensboro NC 27214
(336) 832-6807
Attention:
Heather Carter: heather.carter@conehospital.com
Jenny Grayer: jennifer.grayer@conehospital.com
- Family Support Network
Fsncc.com

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References

- www.nlm.nih.gov
- Hudak, ML. AAP policy revision of policy. *Neonatal Drug Withdrawal*. 101 (6):1079.
- Maguire, D. (2018). Feeding Infants with Neonatal Abstinence Syndrome. *Neonatal Network*, 37, 11-18.
- Texas Department of State Health Services (October 14, 2014) *Stronger Together: Soothing Techniques for Mommies*.

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Resources

- Jackel, J., Johnson, E. I., Reyes, L. M., Layton, K. N., & Harris, M. N. (2021). Conducting research with families of infants born with neonatal abstinence syndrome: Recommendations from rural Appalachia. *Social Work Research, 45*(1), 61–68. <https://doi.org/10.1093/swr/kwab04>
- Lim, N., Stephens, K., Swanson-Beaman, B., Lewis, D., & Whiteman, K. (2021). Implementing trauma-informed strategies for mothers of infants with neonatal abstinence syndrome. *CVN: The Journal of Neonatal Critical Care Nursing, 46*(4), 211–216. <https://doi.org/10.1097/NMC.0000000000000279>
- Marcellus, L. (2014). Supporting women with substance use issues: Trauma-informed care as a foundation for practice in the NICU. *Neonatal Network, 33*(6), 30–314. <https://doi.org/10.1891/0734-6527.33.6.307>

Resources

- Marcellus, L., & Cross, S. (2016). Trauma-informed care in the NICU: Implications for early childhood development. *Neonatal Network, 35*(6), 354–366. <https://doi.org/10.1891/0734-6527.35.6.359>
- Shaikhkhail, A., Jump, C., & Goday, P. S. (2019). Development and pilot implementation of a nutrition curriculum and rotation in pediatric gastroenterology fellowships. *Journal of Pediatric Gastroenterology and Nutrition, 68*(2), 272–281. <https://doi.org/10.1097/MPG.0000000000002121>
- Wisdom, A. C., Govindar, M., Liu, S. J., Meyers, C. M., Melkerson, J. L., Gevin, D. W., DePadilla, L., & Holland, K. M. (2022). Adverse childhood experiences and neonatal abstinence syndrome. *American Journal of Preventive Medicine, 62*(6), S84–S86. <https://doi.org/10.1016/j.amepre.2021.11.015>
- Wokos, A., & Everatt, A. (n.d.). *Using trauma-informed care to guide emergency preparedness and response*. Centers for Disease Control and Prevention. Retrieved September 3, 2022, from <https://bkgp.odc.gov/publichealthmatters/2018-07/trauma-care/>

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