National
Association of
Neonatal
Nurses

Trauma-Informed Care in the NICU

Position Statement
#3075

NANN Board of Directors
(September 2022)

Trauma comes in many forms and is manifested in different ways by those who have experienced it. It is essential that as healthcare providers we are knowledgeable on trauma informed care.

As the professional voice of neonatal nurses, NANN recommends that all clinicians serving babies and families in crisis embrace and operationalize a trauma-informed approach to care in the NICU and beyond.

Introduction
Maternal separation is a significant trauma for newborns across all mammalian species. "Early maternal separation jeopardizes the physical and behavioral health of newborn humans" (Coughlin et al., 2023, p. 69), with as little separation as a 2-hour period immediately after birth having a negative impact on maternal–infant bonding that could be detected even a year later (Bystrova et al., 2009). Coughlin et al. (2023) wrote:

> The infant's experience of maternal separation in the NICU [neonatal intensive care unit] becomes the foundation for cumulative toxic stress exposures, to include unmanaged or undermanaged stress and pain, sleep fragmentation, susceptibility to inappropriate sensory stimuli from the physical and social environments, postural malalignment, and hazardous rituals and routines that do not honor the personhood of the baby (Weber & Harrison, 2019). All of these liabilities have a graded-dose effect on the developing baby enduring early life adversity associated with newborn intensive care. (p. 69)

Additionally, research has shown that clinicians repeatedly exposed to the suffering of others are increasingly susceptible to compassion fatigue, secondary trauma, burnout, and posttraumatic stress disorder. It is imperative to acknowledge the nature of traumatic experiences endured by infants, families, and clinicians in the NICU. The American Academy of Pediatrics expanded upon this topic in a recent clinical report (Forkey et al., 2021) and policy statement (Duffee et al., 2021), identifying evidence-based recommendations aimed at reducing traumatization and re-traumatization as crucial for the safety, health, and wellness of all.

Trauma-informed developmental care invites us to move past a procedure-driven mindset to create a culture of care that emphasizes the pivotal nature of the lived human experiences associated with critical care for the infant, the family, and the clinician (Coughlin et al., 2022).

Background

The Substance Abuse Mental Health Services Administration (SAMHSA) defines *individual trauma* as resulting from "an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or life-threatening and has lasting adverse effects on the individual's functioning and their mental, physical, social, emotional, or spiritual well-being" (SAMHSA, 2014, p. 7).

Trauma that occurs during childhood is described as early-life adversity. In a landmark publication, Provenzi and Montirosso (2015) concluded that prematurity and/or hospitalization in the NICU constitute "an early adverse experience characterized by exposure to high levels of stress and altered buffering effect of maternal care."

Adverse early-life experiences or trauma are mediated by the hypothalamic–pituitary–adrenal (HPA) axis and the stress response system, which causes disruptions, dysregulation, and perturbations of the developing human during critical and sensitive periods of development (Lammertink et al., 2021). This derangement of the stress response system has been linked to alterations in brain connectivity, epigenetic modifications, and compromised immune function (Forkey et al., 2021). Individual vulnerabilities (e.g., genetic background; fetal programming; and timing, duration, and intensity of the toxic stress exposure)—coupled with varied coping strategies and the variable social supports available to the affected individual—undermine physical and mental health across the lifespan for survivors of early-life adversity (Agorastos et al., 2019).

An association between all-cause mortality and shortened gestations has been described. In a multinational, population-based cohort study of more than 6 million individuals, preterm birth was associated with a two-fold increased risk of death from cardiovascular disease, diabetes, and chronic lung disease, with this cohort's leading cause of death identified as suicide and accidents (Risnes et al., 2021). Adults who were born preterm are a growing patient population with significant physical and mental health concerns directly linked to their premature birth (Perez et al., 2020).

For neonatal clinicians, the adoption of a trauma-informed approach is a preventative strategy to mitigate this substantial burden of disease and other short- and long-term consequences associated with early-life adversity and toxic, traumatic stress.

Trauma comes in many forms and is pervasive across all populations, regardless of diagnosis or gestational age. Trauma survivors include individuals who
- experience single acute events that overwhelm their ability to cope
- have a history of complex trauma experienced as part of early-life adversity
- endure repetitive trauma, often as part of an interpersonal relationship
- have been exposed to intergenerational trauma, characterized by psychological or emotional difficulties which affect different communities, cultural groups, and generations

The goal, however, is not to simply survive trauma, but to thrive and flourish. A trauma-informed approach realizes the biological relevance of meeting the basic human needs of safety, belonging, and dignity for all individuals; recognizes signs and symptoms of trauma in the self and others; and responds by fully integrating and adopting knowledge about trauma and healthy human development into policies, procedures, and practices; while actively seeking to resist re-traumatization (Coughlin et al., 2023).

Significance

Trauma-informed developmental care is a holistic framework emphasizing the importance of social connectedness not only for babies and families in crisis but for clinicians as well (Sanders & Hall, 2018). Trauma-informed organizational cultures demonstrate a positive impact on the psychological wellbeing of direct-care providers, leading to better outcomes for those they serve (Keesler, 2020). The adoption of trauma-informed care practices enables staff to be fully present and empathic to the lived experience of neonatal intensive care, alleviating limits to staff capacity to attune to and support the mental-health needs of babies and families in crisis (Klawetter et al., 2022).

NANN has endorsed evidence-based practice guidelines for trauma-informed developmental care (Coughlin, 2017). However, clinicians are cautioned: These guidelines aren't something they can check off as having done but an invitation to unbundle themselves from their unconscious daily routines. Becoming trauma informed invites healthcare professionals to reconnect with their individual life stories as a foundation for authentic and compassionate healing connections with others. Stories matter; they enable and empower clinicians to create meaningful impact in the lives of others and themselves every day (Coughlin et al., 2023).

Neonatal professionals "use a trauma-informed framework to come together to support the baby, parent, and family's holistic physical, developmental, and psychosocial needs from birth to discharge" and beyond as they continue their journey to thrive and flourish (Coughlin et al., 2023, p. 78).

Attributes of a Trauma-Informed Professional

Healthcare professionals embracing this trauma-informed framework integrate caring actions and attitudes that are compassionate, authentic, and courageous into all of their professional and personal encounters. This begins by cultivating the attributes and qualities of a trauma-informed professional. These attributes serve as a guide to becoming trauma informed and are the foundation for NANN's trauma-informed care recommendations.

Knowledge
Core knowledge regarding early-life adversity and how it affects the developing brain is essential. Relevant research crosses all scientific realms, from molecular biology to

psychology, from genetics to metaphysics. Understanding the guiding principles of a trauma-informed approach and the core measures for trauma-informed developmental care provides the foundation to advance and expand knowledge. However, you must recognize that knowledge extends beyond empirical knowing to embrace all ways of knowing.

Healing Intention
"Healing intention requires presence and conscious alignment with the…self to create a sense of oneness or wholeness…during the caring moment" (Coughlin et al., 2023, p. 71). Healing intention invites one to acknowledge positive and negative feelings from a nonjudgmental perspective, support spiritual wellbeing, create sacred transpersonal caring moments, and cultivate trusting interpersonal relationships.

Personal Wholeness
"Personal wholeness is a journey toward physical, psychological, social, spiritual, and existential wellbeing. The self-healing dimensions of personal wholeness mitigate the corrosive effects of stress-reactive habits and support health-promoting activities" (Coughlin et al., 2023, p. 71). The whole person is able to embrace their perceived imperfections and celebrate their unique contribution to humanity.

Courage
Courage involves taking action, facing danger or injustice regardless of retribution. "Taking courageous action can effect change, increase self-actualization, and reduce moral distress (Hawkins & Morse, 2014). Becoming trauma informed requires respectful courage to challenge the status quo" and become a changemaker (Coughlin et al., 2023, p. 71). Courage preserves clinician integrity, "reducing patient suffering and ensuring the delivery of safe, compassionate, quality care" (Coughlin et al., 2023, p. 71).

Advocacy
"Advocacy is any action that speaks in favor of, recommends, argues for a cause, supports or defends, or pleads on behalf of another/others" (Bolder Advocacy, a program of Alliance for Justice, n.d.). "Florence Nightingale set the precedent for advocacy in nursing as she championed safe, clean environments and basic human rights for all" (Coughlin et al., 2023, pp. 71, 75). Preserving human dignity, patient equality, and freedom from suffering form the basis of nursing advocacy.

Role Modelling/Mentorship
"A role model is someone others look to as an example to be emulated" (Coughlin et al., 2023, p. 75). Role models guide, engage, and empower others. Mentoring takes role modeling a step further. Mentoring incorporates coaching with education, requires a generosity of time, empathy, and a willingness to share knowledge and skills. Believing in another person has the power to transform the future.

Scholarship
The scholar shares knowledge, inspires curiosity, and challenges the current status quo. To accomplish these tasks, the trauma-informed scholar must be able to connect with all ways of sharing to create memorable, influential, and transformational encounters. Our words and behaviors not only disseminate information but can "hurt, shame, and even add to an individual's experience of trauma and isolation" (Coughlin et al., 2023, p. 76).

Leadership for Change
Leaders may be formal and informal. Effective leaders are transformational. "In knowing one's self, one can then know another. Recognizing self in others preserves human dignity [and] acknowledges our shared humanity" (Coughlin et al., 2023, p. 76). Transformational leaders have a vested, personal interest in others that ignites creativity, instills a shared vision, and identifies opportunities for change.

Recommendations
Trauma-informed practice in the NICU requires change and commitment at every level.

Hospitals/Healthcare Facilities
1. Cultivate a culture where wholeness, wellness, and equity are prioritized by making health a shared value, fostering cross sector collaboration, strengthening integration of health services and systems, and creating healthier, more equitable communities (Chandra et al., 2017).

2. Provide education to staff to increase healthcare provider knowledge on trauma-informed care and create an empowered trauma-informed workforce (Duffee et al., 2021).

3. Incorporate the principles and practices of a trauma-informed approach into staff onboarding and education, competencies, mentoring activities, and annual performance reviews (Coughlin, 2017).

4. Operationalize trauma-informed developmental care practices as defined by the five core measures of trauma-informed care (Coughlin, 2017).

Healthcare Provider
1. Act in honest and humble ways, treating the patient and family with dignity by indicating that the patient is at the center of the caring relationship (Hemburg & Gustin, 2020).

2. Build therapeutic and healing relationships with patients, families, and peers, shifting away from a task-oriented mindset to a relationship-based model of care (Antonytheva et al., 2021).

3. Be intentionally present to create authentic caring moments (Durkin et al., 2022).

4. Adopt self-care strategies that nurture wholeness, such as contemplative and embodied practices, adequate sleep, optimal nutrition, time in nature, and engaging with supportive and loving social networks (Coughlin, 2021).

5. Practice self-compassion/self-kindness to create a healthy and loving relationship with yourself; self-compassion is a healthy way of relating to the suffering that stems from feelings of inadequacy or general life challenges, cultivating compassion for others and resilience (Neff, 2020).

6. Re-examine/rediscover what you are passionate about and gain clarity for your vision of what is possible (Yahney et al., 2019).

7. Realign with your values and beliefs; these form the foundation for courageous action (Yeo, 2020).

8. Courageously and respectfully speak up in the face of bias, inequity, and prejudice (Beck et al., 2020).

9. Educate yourself on marginalized identities and forms of oppression (Avant & Davis, 2018).

10. Build rapport to promote trusting and safe relationships (Holmes, 2020).

11. Be a voice for vulnerable individuals and populations (American Nurses Association, 2015).

12. Set an intention that enables you to see the potential in another, fostering a sense of connectedness and belonging that cultivates trustworthiness and safety (Broughton et al., 2019).

13. Maintain a reciprocal rapport with others that is grounded in humility and empathy (Sasagawa & Amieux, 2019).

14. Empower others through words and actions that inspire them to be their best selves (Burgess et al., 2018).

15. Use person-centered language that is respectful of the dignity, worth, and uniqueness of every individual (Hyams et al., 2018).

16. Avoid using acronyms and medical jargon; this helps to facilitate and foster a person-centered, relationship-oriented dialogue (Pitt & Hendrickson, 2020).

17. Disseminate research findings and quality improvement work at local, national, and international conferences (McNeal et al., 2021).

18. Treat each individual with kindness, dignity, and respect throughout each and every encounter or professional interaction (Cochrane et al., 2019).

19. Lead yourself and others with a compassionate, understanding, and open heart (Gilbert, 2021).

20. Foster a sense of connectedness and belonging with others that cultivates trustworthiness and safety (Lee & Mahania, 2021).

Conclusions

The first step to transform and humanize the NICU environment is to acknowledge the traumatic nature of this fast-paced, technology-oriented setting for all who inhabit this unique space. In mitigating the suffering of babies and families in crisis, NICU nurses and other interdisciplinary professionals are empowered to transform the experience of intensive care for vulnerable infants, families in crisis, and themselves. Trauma-informed care is an effective, compassionate, and evidence-based strategy that protects and preserves the mental health and moral integrity of clinicians, subsequently improving safety and quality of care, communication, and collaboration in the NICU and beyond.

References

Agorastos, A., Pervanidou, P., Chrousos, G. P., & Baker, D. G. (2019). Developmental trajectories of early life stress and trauma: A narrative review on neurobiological aspects beyond stress dysregulation. *Frontiers in Psychiatry*, *10*, 118. https://doi.org/10.3389/fpsyt.2019.00118.

American Nurses Association. (2015). *Nursing: Scope and standards of practice* (3rd Ed.).

Antonytheva, S., Oudshoorn, A., & Garnett, A. (2021). Professional intimacy in nursing practice: A concept analysis. *Nursing Forum*, *56*(1), 151–159. https://doi.org/10.1111/nuf.12506.

Avant, N. D. & Davis, R. D. (2018). Navigating and supporting marginalized identities in dominant pharmacy spaces. *Innovations in Pharmacy*, *9*(4), Article 8. https://doi.org/10.24926/iip.v9i4.1033.

Beck, A. F., Edwards, E. M., Horbar, J. D., Howell, E. A., McCormick, M. C., & Pursley, D. M. (2020). The color of health: How racism, segregation, and inequality affect the health and well-being of preterm infants and their families. *Pediatric Research*, *87*(2), 227–234. https://doi.org/10.1038/s41390-019-0513-6.

Bolder Advocacy, a Program of Alliance for Justice. (n.d.) *Terminology*. https://bolderadvocacy.org/resource-library/terminology/

Broughton, R. S., Plaisime, M. V., & Green Parker, M. C. (2019). Mentorship: The necessity of intentionality. *The American Journal of Orthopsychiatry*, *89*(3), 317–320. https://doi.org/10.1037/ort0000412.

Burgess, A., van Diggele, C., & Mellis, C. (2018). Mentorship in the health professions: A review. *The Clinical Teacher*, *15*(3), 197–202. https://doi.org/10.1111/tct.12756.

Bystrova, K., Ivanova, V., Edhborg, M., Matthiesen, A. S., Ransjö-Arvidson, A. B., Mukhamedrakhimov, R., Uvnäs-Moberg, K., & Widström, A. M. (2009). Early contact versus separation: Effects on mother-infant interaction one year later. *Birth (Berkeley, Calif.)*, *36*(2), 97–109. https://doi.org/10.1111/j.1523-536X.2009.00307.x

Chandra, A., Acosta, J., Carman, K. G., Dubowitz, T., Leviton, L., Martin, L. T., Miller, C., Nelson, C., Orleans, T., Tait, M., Trujillo, M., Towe, V., Yeung, D., & Plough, A.L. (2017). Building a national culture of health: Background, action framework, measures, and next steps. *Rand Health Quarterly*, *6*(2), 3. PMC5568157.

Cochrane, B. S., Ritchie, D., Lockhard, D., Picciano, G., King, J. A., & Nelson, B. (2019). A culture of compassion: How timeless principles of kindness and empathy become powerful tools for confronting today's most pressing healthcare challenges. *Healthcare Management Forum*, *32*(3), 120–127. https://doi.org/ 10.1177/0840470419836240.

Coughlin, M. (2017). *Trauma-informed care in the NICU: Evidence-based practice guidelines for neonatal clinicians*. Springer Publishing Company. https://doi.org/ 10.1891/9780826131973

Coughlin, M. (2021). *Transformative nursing in the NICU: Trauma-informed age-appropriate care, 2nd edition.* Springer Publishing Company. https://doi.org/10.1891/9780826154323

Coughlin, M., DeWolfe, T., & Fuller, K. (2023). Quality indicators for developmental care: A trauma informed conceptual model as an exemplar for change. In C. Kenner & J.M. McGrath (Eds.), *Developmental care of newborns and infants: A guide for health professionals* (3rd ed., pp. 65–84). National Association of Neonatal Nurses; Wolters Kluwer.

Coughlin, M., DeWolfe, T., & Fuller, K. (2022). Trauma-informed developmental care. In C. Kenner & M.V. Boykova (Eds.), *Neonatal nursing care handbook* (3rd ed., 441–454). Springer Publishing Company.

Duffee, J., Szilagyi, M., Forkey, H., Kelly, E.T., Council on Community Pediatrics; Council on Foster Care, Adoption, and Kinship Care; Council on Child Abuse and Neglect; & Committee on Psychosocial Aspects of Child and Family Health. (2021). Trauma-informed care in child health systems. *Pediatrics*, *148*(2), e2021052579. https://doi.org/10.1542/peds.2021-052579.

Durkin, J., Jackson, D., & Usher, K. (2022). Compassionate practice in a hospital setting. Experiences of patients and health professionals: a narrative inquiry. *Journal of Advanced Nursing*, *78*(4), 1112–1127. https://doi.org/10.1111/jan.15089.

Forkey, H., Szilagyi, M., Kelly, E. T., Duffee, J., Council on Foster Care, Adoption, and Kinship Care; Council on Community Pediatrics; Council on Child Abuse and Neglect; & Committee on Psychosocial Aspects of Child and Family Health. (2021). Trauma-informed care. *Pediatrics*, *148*(2), e2021052580. https://doi.org/10.1542/peds.2021-052580.

Gilbert, P. (2021). Creating a compassionate world: Addressing the conflicts between sharing and caring versus controlling and holding evolved strategies. *Frontiers in Psychology*, *11*, 582090. https://doi.org/10.3389/fpsyg.2020.582090.

Hemburg, J. & Gustin, L. W. (2020). Caring from the heart as belonging—The basis for mediating compassion. *Nursing Open*, *7*(2), 660–668. https://doi.org/10.1002/nop2.438.

Holmes, K. (2020, October 3). *6 tips for trauma-informed advocacy*. Ohio Alliance to End Sexual Violence blog. https://oaesv.org/where-we-stand/blog/2020/10/03/6-tips-for-trauma-informed-advocacy

Hyams, K., Prater, N., Rohovit, J., & Meyer-Kalos, P. S. (2018). *Person-centered language* (Clinical Tip No. 8, April, 2018). Center for Practice Transformation, University of Minnesota. https://practicetransformation.umn.edu/practice-tools/person-centered-language/#:~:text=What%20is%20Person%2DCentered%20Language,and%20strengths%20of%20every%20individual.

Keesler, J. M. (2020). Promoting satisfaction and reducing fatigue: Understanding the impact of trauma-informed organizational culture on psychological wellness among Direct Service Providers. J*ournal of Applied Research in Intellectual Disabilities*, *33*(5), 929–949. https://doi.org/10.1111/jar.12715.

Klawetter, S., Cetin, N., Ilea, P., McEvoy, C., Dukhovny, D., Saxton, S. N., Rincon, M., Rodriguez-JenKins, J., & Nicolaidis, C. (2022). "All these people saved her life, but she needs me too": Understanding and responding to parental mental health in the NICU. *Journal of Perinatology*, *15*, 1–8. https://doi.org/10.1038/s41372-022-01426-1.

Lammertink, F., Vinkers, C. H., Tataranno, M. L., & Benders, M. J. N. L. (2021). Premature birth and developmental programming: Mechanisms of resilience and vulnerability. *Frontiers in Psychiatry*, *11*(531571). https://doi.org/ 10.3389/fpsyt.2020.531571.

Lee, P. T. & Mahaniah, K. J. (2021). Leading with love: Five practical tips. *Journal of General Internal Medicine*, *36*(11), 3530–3531. https://doi.org/10.1007/s11606-021-06768-8.

McNeal, D. M., Glasgow, R. E., Brownson, R. C., Matlock, D. D., Peterson, P. N., Daugherty, S.L., & Knoepke, C.E. (2021). Perspectives of scientists on disseminating research findings to non-research audiences. *Journal of Clinical and Translational Science*, *5*(1), e61. https://doi.org/10.1017/cts.2020.563.

Montirosso, R. & Provenzi, L. (2015). Implications of epigenetics and stress regulation on research and developmental care of preterm infants. *Journal of Obstetric, Gynecologic, And Neonatal Nursing: JOGNN*, *44*(2), 174–182. https://doi.org/10.1111/1552-6909.12559.

Neff, K. D. (2020). Commentary on Muris and Otgaar (2020): Let the empirical evidence speak on the Self-Compassion Scale. *Mindfulness*, *11*(8), 1900–1909. https://doi.org/10.1007/s12671-020-01411-9.

Perez, A., Thiede, L., Ludecke, D., Ebenebe, C. U., von dem Knesebeck, O., & Singer, D. (2020). Lost in transition: Health care experiences of adults born very preterm—a qualitative approach. *Frontiers in Public Health*, *8*(605149). https://doi.org/10.3389/fpubh.2020.605149.

Pitt, M. B. & Hendrickson, M. A. (2020). Eradicating jargon-oblivion—A proposed classification system of medical jargon. *Journal of General Internal Medicine*, *35*(6), 1861–1864. https://doi.org/10.1007/s11606-019-05526-1.

Risnes, K., Bilsteen, J. F., Brown, P., Pulakka, A., Anderson, A-M. N., Opdahl, S., Kajantie, E., & Sandin, S. (2021). Mortality among young adults born preterm and early term in 4 Nordic nations. *JAMA Network Open*, *4*(1), e2032779. https://doi.org/10.1001/jamanetworkopen.2020.32779

Sanders, M. R. & Hall, S. L. (2018). Trauma-informed care in the newborn intensive care unit: Promoting safety, security and connectedness. *Journal of Perinatology*, *38*(1), 3–10. https://doi.org/10.1038/jp.2017.124.

Sasagawa, M. & Amieux, P. S. (2019). Concept map of dispositional humility among professionals in an interdisciplinary healthcare environment: Qualitative synthesis. *Journal of Multidisciplinary Healthcare*, *12*, 543–554. https://doi.org/10.2147/JMDH.S206526.

Substance Abuse and Mental Health Services Administration. (2014). *SAMHSA's concept of trauma and guidance for a trauma-informed approach* (SMA Publication No. 14-4884). U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Office of Policy, Planning and Innovation. https://store.samhsa.gov/product/SAMHSA-s-Concept-of-Trauma-and-Guidance-for-a-Trauma-Informed-Approach/SMA14-4884

Watson, J. (2018). *Unitary caring science: Philosophy and praxis of nursing*. University Press of Colorado. https://doi.org/10.5876/9781607327561

Weber, A. & Harrison, T. M. (2019). Reducing toxic stress in the NICU to improve infant outcomes. *Nursing Outlook*, *67*(2), 169–189. https://doi.org/10.1016/j.outlook.2018.11.002.

Yahney, E., Ambrose, S., & Vega, R. (2019). How to move a "giant": 7 lessons learned for making a change in a large organization. *The Permanente Journal*, *23*(4), 18.306. https://doi.org/10.7812/TPP/18.306.

Yeo, R. K. (2020). Know thyself. *Organizational Dynamics*, *50*(4), 100800. https://doi.org/10.1016/j.orgdyn.2020.100800.

National Association of Neonatal Nurses