The Imprints of Neonatal Death

A Qualitative Study on Neonatal Intensive Care Nurses' Experiences of Neonatal Death

Deniz Kaya Meral, PhD; Behice Belkıs Çalışkan, PhD; Yasemin Çekiç, PhD; Gülhan Küçük Öztürk, PhD; Beyhan Bağ, PhD, RN

ABSTRACT

Background: Grief can pose significant challenges in nurses' lives, impacting both their personal well-being and work performance.

Purpose: The aim was to examine neonatal intensive care nurses' (NICU) experiences with neonatal death.

Methods: This study used a qualitative, phenomenological study design. The study group consisted of 17 nurses in the NICU. Data were collected online via Zoom using a semi-structured interview form and analyzed through a content analysis. The study was reported in line with the COREQ (Consolidated Criteria for Reporting Qualitative Research) checklist.

Results: Two main themes and five sub-themes emerged. (1) "Grief" conveyed that nurses developed an *empathetic bond* with the newborn and family through their interactions during the care process, that confronting the *empty incubator* after the newborn's loss evoked profound and complex emotions, and that they sometimes had to maintain a delicate *balance on ice* to navigate their emotional intensity. (2) "Transformation" illustrated how grief was *reflected* in nurses' lives, influencing specific roles they assumed, and how they frequently experienced a deep need for *contact* following the loss of a baby.

Implications for Practice and Research: To support the grieving process, structural interventions such as debriefings, reflective sessions, group-based psychosocial resilience workshops, and supervision should be promoted, along with flexible rest periods that allow nurses who need solitude to recuperate. Understanding the impact of newborn loss on nurses' lives may also guide the development of appropriate support interventions.

Key Words: grief, neonatal death, neonatal intensive care unit, nurses, qualitative study

Neonatal mortality remains a significant global public health concern. According to 2022 data from the World Health Organization, approximately 2.3 million infants die during the neonatal period each year.[1] In the United States, the neonatal mortality rate increased by 3% from 3.49 per 1,000 live births in 2021 to 3.59 in 2022.[2] In Turkey, the neonatal mortality rate is considerably higher than the European Union average; data from the Ministry of Health in 2022 report 9.1 neonatal deaths per 1,000 live births.[3] These statistics not only reflect systemic challenges in perinatal care but also reveal the emotional and psychological burden experienced by healthcare providers.

Grief following neonatal loss is a complex and deeply personal process. It often involves intense sorrow, sadness, a search for meaning, and even a decline in daily functioning.[4] These "grief" experiences typically occur outside the workplace, affecting both personal well-being and professional performance.[5]

NICU nurses are particularly vulnerable in this context. Because of the fragility of the infants they care for and the emotional bonds formed with families, nurses may experience neonatal loss as a form of personal bereavement.[6-8] Studies have shown that this type of grief can threaten nurses' psychological health, and that many carry this

Author Affiliations: Faculty of Health Sciences, Department of Nursing, İstanbul Gelişim University, Istanbul, Turkey (Dr Kaya Meral); Faculty of Health Sciences, Department of Nursing, İstanbul Beykent University, İstanbul, Turkey (Dr Çalışkan); Faculty of Nursing, Department of Psychiatric Nursing, Ankara University, Ankara, Turkey (Dr Çekiç); Semra and Vefa Küçük Faculty of Health Sciences, Department of Psychiatric Nursing, Nevşehir Hacı Bektaş Veli University, Nevşehir, Turkey (Dr Küçük Öztürk); and Dual Study Program in Nursing, Ludwigshafen University of Business and Society, Mannheim, Germany (Dr Bağ).

This study was conducted by the Consultation Liaison Psychiatry Nursing Working Group, commissioned by the Turkish Association of Psychiatric Nursing. We would like to thank the individuals who participated in the study.

There is no conflict of interest declared by the authors.

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Ethical Approval: *For ethics committee approval, approval number E-45778635-050.99-103019 was obtained on 11 May 2023, from the Scientific Research Publication Ethics Board for Social and Human Sciences at Istanbul Beykent University, where one of the researchers is affiliated. The participants' consents were obtained by informing them in accordance with the Declaration of Helsinki. Throughout the reporting stage of the data, the names of the participants were kept confidential and coded (ie, Nurse 1).*

Correspondence: *Deniz Kaya Meral, PhD, MSc, RN, Faculty of Health Sciences, Department of Nursing, İstanbul Gelişim University, Cihangir Mah. Şehit Jandarma Komando Er Hakan Öner Sk. No: 1, Avcılar, İstanbul 34310, Turkey (dkaya@gelisim.edu.tr).*

DOI: 10.1097/ANC.0000000000001310

emotional weight into their home lives.[9,10] The lack of institutional support mechanisms following such losses has also been associated with negative long-term outcomes, such as moral distress and burnout.[11,12] Although neonatal loss has been widely studied from the perspective of families, the emotional experiences of NICU nurses remain understudied.[13,14] Recent reviews emphasize that nurses' emotional burden and unmet support needs following neonatal death highlight the need for further research in this area.[12,15,16] This study aims to address this gap by exploring how NICU nurses experience and cope with neonatal loss.

METHODS

Research Type

This descriptive phenomenological study, based on Husserl's approach, explored the experiences of NICU nurses facing neonatal death. Husserl's descriptive phenomenological approach emphasizes exploring lived experiences as they appear in consciousness, free from preconceptions or theoretical assumptions.[17] The COREQ checklist was utilized for reporting qualitative research in the study.[18] The research team consisted of academics with expertise in mental health and psychiatric nursing, qualitative research, and bereavement studies. The first author, who conducted all the interviews, is a certified psychodramatist with professional experience in interpreting emotional cues and group dynamics.

Population and Sampling of the Research

The sample included 17 NICU nurses from various regions of Turkey who volunteered to participate. Participants were selected using the snowball sampling method. The first participant was reached through their social media account (Instagram) to test the comprehensibility of the research questions and the application. This participant served only as a bridge to connect with other participants and was not included in the analysis process.[19] The research was conducted between June and October 2023.

Inclusion Criteria of the Research

The study included Turkish-speaking NICU nurses who had at least two years of experience, had experienced at least one neonatal loss, and voluntarily consented to participate and be audio recorded. No nurses withdrew during the study.

Data Collection Tools

Data were collected using a sociodemographic information form and a semi-structured interview form.

Introductory Information Form

Demographic data were collected on the ages, marital statuses, educational backgrounds, places of residence, workplaces, and years of service of NICU nurses.

Semi-Structured Interview Form

NICU nurses answered open-ended questions assessing their experiences regarding neonatal death. Questions were developed in collaboration with experts in neonatal nursing and qualitative research. Table 1 presents the complete list of questions.

Data Collection Process

The first researcher (DKM) conducted the interviews using the introductory information form and the semi-structured interview form. Because the participants were from different cities and working conditions, the interviews were conducted online via the Zoom platform and recorded. Interviews were planned based on the nurses' work schedules. Field notes were taken during the interviews and evaluated during the analysis process. Interviews continued until data saturation was reached—defined as the point when no new themes emerged—and this was further confirmed through two additional interviews.[20,21] Interviews were concluded when repetitive statements began to emerge. On average, each interview lasted 50 minutes.

Data Analysis

Demographic data were analyzed using numbers and percentages in SPSS version 26, while qualitative data from Zoom recordings were analyzed manually. Interview transcripts were returned to participants with summaries, and they were asked to confirm or revise as needed. A total of 206 pages of transcripts from 17 participants were analyzed using a content analysis approach. Three researchers (DKM, BBC, YC) independently coded the data, and their codes were compared to identify common themes and sub-themes.[22] Three experts reviewed the findings to confirm the validity of the themes. Final themes and sub-themes were supported with direct participant quotes.

TABLE 1. Questions of the Semi-Structured Interview

• Opening question: What is it like to be a neonatal intensive care nurse?
• What does neonatal death mean to you?
• What did you experience regarding death as a neonatal intensive care nurse?
• How does the neonatal death affect your life?
• What do you need to cope with the effects of neonatal death in your life?
• Closing question: Are there any other situations that you would like to add which I did not ask about?

Credibility and Trustworthiness of Qualitative Data

To ensure reliability, prolonged engagement, member checking, expert opinion, and triangulation were used.[23] Researchers maintained in-depth interaction with each participant to build rapport. Although each nurse was interviewed only once, the emotional intensity and length of the interviews contributed to building rapport and trust, enabling participants to share their experiences more openly and sincerely.[17] Participants were given summaries of their interviews and asked to confirm accuracy or suggest revisions. Their feedback strengthened the validity of the data.[24] Triangulation involved individual interviews and observational field notes, including emotional expressions, body language, and participants' reactions, which the first researcher recorded to contribute to data interpretation.[25] Themes and questions in the interview form were developed in consultation with experts. To enhance the study's reliability, support was obtained from independent nurses with doctoral degrees who specialize in neonatal care and qualitative research. These experts contributed by providing insights into neonatal care routines, nursing experiences, and clinical practices, thereby strengthening the foundation of the study. To ensure verifiability, field notes were treated as raw data, and participants' statements were directly reflected in the research report. The findings are considered transferable to similar groups and contexts.

RESULTS

The analysis of the nurses' demographic characteristics revealed that all participants in the study were female. The mean age was 30.71 ± 7.05 years. The mean working period of the nurses was 8.35 ± 6.86 years. Of the nurses, seven (41%) were single and 10 (59%) were married. Three of the nurses had children. As a result of the content analysis, two main themes and five sub-themes were identified; Table 2 presents these themes, along with representative quotations that reflect participants' perspectives.

TABLE 2. Themes and Sub-Themes With Illustrative Quotes

Themes	Sub-Themes	Illustrative Quotes
Grief	Empathetic bond	When I hold them, it feels like they are my own child, and I'm afraid something might happen to them." (Nurse 3)
	Empty incubator	While walking back and forth in the unit, I glance at the empty incubator—the monitor is off, and the baby's name card is still there. It reminds me that the baby was alive not long ago, and now they're gone. (Nurse 8)
	Balance on ice	I try to accept it as part of the reality of our work, even when it's hard to process. (Nurse 6)
Transformation	Reflection	I looked at my children, changed their routine, listened more, and tried to make memories. (Nurse 11)
	Contact	Sharing with my team helps me realize I'm not alone. Grief is both personal and shared. Group sessions could boost our resilience. (Nurse 12)

Theme 1: Grief

Almost all NICU nurses reported experiencing a mourning process following neonatal deaths. The "Grief" theme included three sub-themes: empathetic bonding with the baby and family, the empty incubator symbolizing emotional void, and balance on ice reflecting efforts to maintain emotional distance and rationalize the process to cope with the loss.

Empathetic Bond

Nurses explained that they developed empathic bonds with babies and their families through care interactions, such as informing mothers, talking to the baby, and delivering care. The nurses stated that the time they spent caring for the baby directly influenced how deeply they experienced grief. They emphasized that losing babies they had cared for over extended periods led to more intense mourning. In addition, they highlighted that the unexpectedness of the death was a significant factor shaping the emotional intensity of their grief. When the death was unexpected, nurses experienced more profound sorrow and had more difficulty coping with the loss. Most nurses shared that the empathic bonds they formed with the babies awakened their maternal instincts. They often held the infants close, spoke to them gently, and responded to their needs with the care and attentiveness of a mother.

> "… I took care of that baby for a long time. I had a lot of contact with his family during the day shifts… as I said, that baby had a profound impact on me. I mean, the family was waiting with great hope…" (Nurse 14, participant, while saying these statements, made a gesture of looking with her hands for a long time and showed an emotional facial expression.)

"It feels as if we have a maternal role in some way. When caring for those babies, I find myself stepping

into the role of a mother. Even when I hold them, it feels like they are my child, and I don't want anything to happen to them." (Nurse 3, as the participant expressed these words, she crossed her arms and gazed into the distance, clearly internalizing the topic and showing emotional involvement.)

"…I wish none of them had to die. For example, when I work during the day, I find myself wondering the next day, 'I cared for that baby. What happened to them? Is their condition worse?' I get curious and send messages to my colleagues to ask about the baby's condition." (Nurse 9, while sharing this statement, her eyes welled up with tears, and her voice trembled, revealing her emotional response.)

"When there is an unexpected death, I struggle to pull myself together for the first few hours. I can't accept the situation… There has to be an explanation! Why did this happen? I keep questioning the reason over and over." (Nurse 13, as the participant spoke these words, she moved her hands over her head, her eyes filled with confusion and deep thought.)

Empty Incubator

Many NICU nurses reported that neonatal deaths had a deep emotional impact, marked by helplessness, guilt, and disappointment. They described a persistent emotional void following the loss of babies under their care. Despite providing the best possible care, nurses expressed helplessness about their inability to prevent the deaths. Some also reported feelings of guilt for not being able to save the newborns. The image of the empty incubator often resurfaced in their minds, triggering vivid memories and emotional distress. Informing the family and handing over the baby's belongings were described as the most emotionally challenging aspects of the farewell process. Nurses emphasized that coping with the emotional weight of these moments was particularly difficult.

"I think there was a sense of shame. A baby died in the department, and we couldn't do anything. I felt as if the baby was saying inwardly, 'You couldn't save me.' At the same time, I felt as if he was blaming me." (Nurse 17, while saying these words, the participant's voice trembled, her eyes filled with tears, and she paused for a moment, taking a deep breath.)

"… I look at my babies in that huge space as I go back and forth. Meanwhile, the monitor on the incubator is off, and the baby's name card is still there. It comes to mind – you think that they were alive before, but now they are gone…" (Nurse 8, the participant's voice lowered, and she remained silent for a while while she was conveying this statement. She lowered her eyes to the floor, took a deep breath, and appeared to have difficulty continuing to speak.)

"When handing the baby's clothes and items to the family, it feels like a farewell scene… That moment of returning the belongings is the most emotional and heartbreaking. The mother's state at that moment remains as the final emotional image in my mind…" (Nurse 1, her eyes were full of tears as she conveyed this statement, visibly experiencing an emotionally intense moment.)

Balance on Ice

Nurses reported intentionally or unconsciously creating emotional distance to regulate their feelings while coping with neonatal loss. This distance was maintained through internal dialogue, cognitive reframing, and focus on professional responsibilities. Rather than fully engaging with the emotional pain, they sought to rationalize the loss within a clinical and logical framework. Such emotional distancing was described as a necessary strategy in settings where nurses face repeated losses and lack structured emotional support.

"You experience the moment and accept it… In the end, this is reality – this is how death occurs in this setting, and you come to terms with that." (Nurse 6, as the participant expressed these words, she opened her hands to the sides, displaying an accepting demeanor.)

"I am not always an emotional person, but sometimes I wish I could be even less so… I think maybe that would be better for the family." (Nurse 15, her voice carried an uncertain tone as she briefly lowered her gaze.)

"If you are in this profession, you will inevitably witness deaths… At some point, you have to get used to babies dying." (Nurse 10, speaking with a slight nod, her voice conveyed both determination and a sense of resignation.)

Theme 2: Transformation

NICU nurses stated that neonatal loss led to emotional changes, transforming both their personal and professional roles. The theme of transformation was addressed with the sub-themes of reflection and contact.

Reflection

The nurses participating in the study described the impact of neonatal loss on their lives, primarily reflecting on how the loss of the newborns they cared for influenced their roles as mothers, nurses, and friends. In their maternal role, nurses reported that neonatal loss triggered intense emotions, led them to modify their children's routines, and made them more protective. Nearly all nurses without children expressed a fear of embracing the maternal role in the future, emphasizing their apprehension about assuming this responsibility. For them, experiencing neonatal loss magnified the perceived responsibilities and potential risks associated with becoming a mother. In their nursing role, they described how encountering death made them more controlling in their caregiving practices. To counterbalance the helplessness, guilt, and frustration caused by loss—and to minimize uncertainties—they focused on aspects of care they could control, providing them with a sense of security. In their role as friends, nurses admitted that they struggled to conceal their emotions, making their distress evident to those around them. As a result, their emotions were often noticed by friends, leading them to adjust their social plans accordingly.

> "I keep my children under my wings, always within my sight, even if it means exhausting them for a day or two. There are also moments when I wake up at night just to check if they are breathing." (Nurse 2, as the participant expressed these words, she gently moved her hands forward, and her eyes focused intently, as though deeply reflecting on the situation.)

> "… When I came home, I looked at my children and thought, I don't know what will happen to me tomorrow. So I changed their routine that evening. … I talked to them longer. Instead of helping them with their homework, I focused on listening to them and making memories together." (Nurse 11, had a sad smile on her face, and her voice was soft but determined.)

> "…Honestly, I feel that what I've been through is reflected in my care … I've become more sensitive, especially to sounds! I check the alarm limits immediately. I also warn my teammates to check everything carefully." (Nurse 5, in the interview room, she gestured frequently with her hands while saying these statements, pointing to the alarm systems. Expressions of concern and caution appeared on her face, and her voice was louder and more empathetic.)

> "…I am terrified of having my baby – what if I lose my baby?" (Nurse 4, while saying this statement, the participant paused for a moment and lowered her eyes to the floor. It was clear that she was talking about something that affected her very emotionally.)

> "If we're planning to go somewhere lively and entertaining, I often find myself thinking, 'I just don't have the mental capacity for such social activities'. … Or if I've already made plans and attended a gathering, I can't help but talk about what happened at work – about the baby we lost – my tongue won't stop. I always dedicate at least 15 minutes of the conversation to this." (Nurse 10, as the participant spoke, traces of exhaustion and emotional burden were evident in her eyes.)

Contact

NICU nurses reported that the need for contact was a vital coping method for them after the loss of the baby they cared for. Most nurses stated that they tried to manage this process after the loss by touching another baby, forming emotional bonds with colleagues, or spending time with their children. While some nurses stated that being alone was good for them, others emphasized that sharing their feelings provided superb support in the grief process. In particular, they indicated that peer support and group settings could help them make sense of their grief.

> "At that moment, something happens inside me that I cannot express. Maybe I can describe that feeling as healing from another baby." (Nurse 7, participant made a hugging gesture with her hands while saying these statements, and her eyes were restless.)

> "Sometimes, I need to be alone to process everything I feel after losing a baby. When I'm alone, I can calm myself down more quickly and regain my composure." (Nurse 5, as the participant spoke, she gently clasped her hands and focused her gaze on a single point. Her voice was calm, yet its tone reflected how deeply she had internalized the experience.)

> "For example, sharing with my teammates, realizing that you are not alone, and acknowledging that grieving after losing a baby is part of the job could be helpful. The grieving process is deeply personal, yet it is also a shared experience. Group sessions could be conducted to strengthen our psychological resilience." (Nurse 12, the participant spoke with a determined tone, while her body language reflected contemplation. Her facial expression conveyed the seriousness with which she approached the topic.)

> "When we lost the baby, I talked with my fellow nurses. Everyone was deeply saddened, and we supported one another. … In this regard, we all need professional counseling." (Nurse 15, the participant spoke in an emotional tone, her eyes slightly narrowing as she expressed her thoughts.)

DISCUSSION

This qualitative study examined the experiences of neonatal death among nurses in the NICU. Two main themes were identified: (1) "Grief," with subthemes of empathetic bond, empty incubator, and balance on ice; and (2) "Transformation," with subthemes of reflection and contact. The findings reveal how nurses make sense of neonatal loss and its impact on their personal and professional lives. This study is expected to contribute to existing literature and guide future research.

There is a widespread consensus that the grief process is challenging for health professionals.[15,26] NICU nurses, however, may experience grief more intensely than those in other specialties due to the extreme vulnerability and complex needs of the newborns, as well as the deep emotional bonds often formed with both babies and their families.[5,27-29] In the present study, nurses' grief responses were multifaceted and strongly influenced by the emotional connections built during caregiving. As revealed in the empathetic bond subtheme, nurses reported developing strong emotional connections not only with the newborns but also with their families. This sense of attachment, especially when prolonged caregiving was involved, intensified their grief and made the process more complex. Nurses who develop a sense of attachment to the babies they have cared for over an extended period experience a more profound grieving process following their loss. In addition, it was understood that the nurses saw the babies not only as patients but also as a part of themselves. Indeed, studies have reported that caregivers tend to personalize losses, and this increases the severity of grief.[30,31] In this study, it is evaluated that the strong emotional bond that nurses establish with newborns may complicate the grief process. Many nurses described embracing a maternal role, expressing that they often felt responsible for the baby as if the baby were their own. These findings suggest that this situation may contribute to the intensification of the grief process by increasing feelings of guilt and helplessness. It is also stated in the literature that the grief process becomes more complex when health professionals identify with the individuals they care for.[6] Kokturk Dalcali, et al (2022)[32] also noted that strong emotional attachment among NICU nurses may deepen their grief. How nurses experience grief is as significant as how they cope with it. In our study, unexpected deaths intensified this experience, often leading to emotional questioning. The findings of this study suggest that cognitive questioning increases during the grief process, which may in turn increase emotional intensity. Similarly, previous studies have also reported that nurses experience intense cognitive questioning as they make sense of losses.[30,33]

In the "empty incubator" sub-theme, neonatal deaths were found to have a profound emotional impact on nurses, leading to feelings of emptiness, helplessness, and guilt. The literature similarly reports that nurses may experience emptiness and disappointment,[16] helplessness,[30,33] and guilt after the death of a newborn.[34,35] In this study, the most emotionally challenging moments were described as delivering the death news and handing over the baby's belongings to the family. Demirbag, et al (2024)[36] linked these emotional responses to concerns about having missed something in the care process. At the same time, Kokturk Dalcali, et al (2022)[32] highlighted the difficulty of ensuring the family got to see the baby one last time. Previous research also confirms that returning the baby's belongings is an emotionally distressing task for nurses.[37] The findings suggest that feelings of helplessness may shape how nurses cope with grief. Despite doing their best, some nurses questioned their professional competence after a neonatal loss, which may have intensified their grieving process. According to the literature, being unable to achieve a positive outcome in critical cases can harm the self-esteem and emotional resilience of healthcare professionals.[15] This may prolong the grieving process and increase emotional burden. Some studies indicate that debriefings may help NICU nurses cope with feelings of helplessness and guilt.[5,38] Such meetings can encourage the team to share their experiences, provide professional support, and enhance the quality of care in the subsequent processes.[39] However, in this study, nurses reported limited access to support systems after a neonatal death. Another essential dimension of grief was reflected in the balance of the ice subtheme. Nurses described regulating their emotions by creating psychological distance or rationalizing the situation.[35,40] These strategies are considered a significant coping method for maintaining emotional balance.[41]

Under the theme of Transformation, the nurses in this study reported that neonatal loss led to a transformation in both their personal and professional lives. Previous studies have similarly shown that neonatal death can significantly affect nurses' personal and professional roles and result in severe psychological and emotional consequences.[42,43] Participants stated that the loss influenced their caregiver roles, disrupted their nursing routines,

Summary of Recommendations for Practice and Research	
What we know:	• Taking into account the newborn's vulnerability, high risk of injury, complex care needs, and prolonged hospitalizations, the loss of a newborn may lead nurses to experience negative emotions. • It is noted that the loss experienced by nurses affects them both personally and professionally. • Neonatal deaths may lead to emotional distress and burnout in NICU nurses.
What needs to be studied:	• Further explore how neonatal nurses internalize newborn death as a personal loss and how this grief interacts with their maternal instincts, caregiving responsibilities, and emotional coping strategies. • Investigate the effectiveness of reflective sessions, peer-based emotional support, and structured post-loss interventions (eg, group discussions or debriefings) in reducing the emotional burden and supporting meaning-making after loss. • Examine the role of physical or emotional "contact" (with other infants, own children, or colleagues) in grief regulation and emotional healing to inform individualized support mechanisms. • Identify how solitary coping methods versus team-based support are utilized by nurses, and which combinations are most effective in preventing long-term emotional exhaustion. • Investigate the grief experiences of male neonatal nurses, as gender may influence emotional responses and coping mechanisms.
What we can do today:	• Implement structured post-loss debriefings within NICUs to help nurses process feelings of guilt, helplessness, and sadness in a guided and supportive environment. • Promote short reflective team sessions that allow emotional expression and encourage mutual support among peers. • Establish flexible work policies such as brief rest periods or adjusted shifts after neonatal death to accommodate individual emotional recovery needs. • Develop supervision opportunities and mentorship support for nurses struggling to rationalize or emotionally distance themselves from repeated loss experiences. • Encourage the creation of peer-support groups and offer targeted psychological training to foster resilience, especially in nurses who experience repeated or unexpected losses. • The study reveals how neonatal intensive care nurses experience grief following newborn loss and how it transforms their personal and professional roles. • Specific emotional and support needs of NICU nurses during the grieving process were identified, offering insight for targeted psychosocial interventions. • Our findings offer actionable insight for the development of reflective support practices—such as clinical supervision and peer-based group sessions—to help NICU nurses cope with neonatal loss.

and even affected their friendships. They particularly emphasized that the loss strongly impacted the maternal role they assumed while caring for the newborn. In addition to its emotional impact, recent studies have shown that frequent exposure to neonatal death in NICUs may lead to secondary traumatic stress and burnout among nurses.[44,45] In the study conducted by Ravaldi, et al (2023)[44] more than 35% of NICU nurses exhibited moderate to severe symptoms of post-traumatic stress, and a significant relationship was found between the frequency of loss and higher levels of burnout.

In this study, nurses indicated that they needed time to process their emotions and cope with the loss. They suggested that group settings providing peer support could be beneficial in this regard. Some nurses also reported that making physical contact with other newborns in their care or spending time with their own children provided emotional relief after the loss. These findings highlight the diverse range of coping strategies employed by nurses. The literature frequently emphasizes the necessity of grief education and psychosocial support for neonatal nurses;[46-48] it is also reported that both individual and institutional-level interventions play an essential role in this process. Nurses have been shown to use individual strategies such as turning to religious beliefs, seeking solitude and silence, engaging in meaning-making, sharing emotions with colleagues, spending time with family, and establishing physical contact with other infants.[30,40] Moreover, institutional practices such as establishing safe communication environments, conducting structured debriefings, planning culturally sensitive interventions, and providing managerial support have been found effective in alleviating emotional burden.[15,16] These forms of support have also been shown to enhance workplace well-being among healthcare professionals.[49,50]

Limitations

This study has several limitations. The relatively small number of participants limits the generalizability of the findings to different contexts. Additionally, the inclusion of only female nurses

restricted the representation of male nurses' experiences. The fact that participants had an average of eight years of professional experience also limits the transferability of the findings to nurses with varying levels of seniority. Although the nurses were employed in different regions of Turkey and various healthcare institutions, regional and institutional practices may have influenced both their experiences and how they expressed them. Furthermore, cultural factors related to grief and neonatal loss are also thought to have shaped participants' narratives. Therefore, the findings of this study are limited to the NICU nurses who participated in this research.

CONCLUSION

This study revealed that NICU nurses formed close emotional bonds with newborns and their families, which intensified the grief they experienced after a loss. This grief was marked by feelings of emptiness, helplessness, and guilt, and often disrupted nurses' personal and professional roles. Many nurses reported a need for emotional connection after the loss—primarily with their children, colleagues, family members, or other newborns under their care. Some nurses found comfort through reflection and solitude, while others emphasized the healing effect of peer support. However, most described limited access to formal support systems. These findings highlight the need for practical, accessible interventions—such as debriefings, reflective group meetings, flexible rest periods, and brief clinical supervision sessions—to promote emotional well-being and professional sustainability in the face of neonatal loss.

References

1. World Health Organization. Newborn mortality. Published 2024. Accessed March 28, 2025. https://www.who.int/news-room/fact-sheets/detail/newborn-mortality
2. Ely DM, Driscoll AK. Infant mortality in the United States, 2022: data from the period linked birth/infant death file. *Natl Vital Stat Rep*. 2024;73(5):1-22. https://www.cdc.gov/nchs/products/index.htm
3. Ministry of Health of the Republic of Turkey. Health statistics Yearbook 2022. Published 2024. Accessed March 28, 2025. https://dosyasb.saglik.gov.tr/Eklenti/48055/0/siy2022eng050420241pdf.pdf
4. Szuhany KL, Malgaroli M, Miron CD, et al. Prolonged grief disorder: course, diagnosis, assessment, and treatment. *Focus*. 2021;19(2):161-172. doi:10.1176/appi.focus.20200052
5. Barnes S, Jordan Z, Broom M. Health professionals' experiences of grief associated with the death of pediatric patients: a systematic review. *JBI Evidence Synthesis*. 2020;18(3):459-515. doi:10.11124/JBISRIR-D-19-00156
6. Chatmon BN, Richoux D, Sweeney B. The impact of end-of-life care among nurses working in the pediatric intensive care unit. *Crit Care Nurs Clin North Am*. 2023;35(3):275-286. doi:10.1016/j.cnc.2023.04.002
7. Ferro TA, Silva LTPD, Silva-Rodrigues FM, Santos MRD, Szylit R. Nurses' beliefs in the care of newborns at the end of life in the neonatal intensive care unit. *Rev Esc Enferm USP*. 2024;58:e20240065. doi:10.1590/1980-220X-REEUSP-2024-0065en
8. Rodriguez A, Spilker A, Goyal D. Grief among neonatal intensive care nurses. *MCN Am J Matern Child Nurs*. 2020;45(4):228-232. doi:10.1097/NMC.0000000000000634
9. Mufato LF, Gaiva MAM. Reasons why of nurses empaty with newborn families in neonatal ICU. *Rev Gaucha Enferm*. 2020;41:e20190508. doi:10.1590/1983-1447.2020.20190508
10. Wocial LD, Hannan A. Unmasking grief: reflections on the complicated relationship between moral distress and grief. *Semin Fetal Neonatal Med*. 2023;28(4):101445. doi:10.1016/j.siny.2023.101445
11. Grauerholz KR, Fredenburg M, Jones PT, Jenkins KN. Fostering vicarious resilience for perinatal palliative care professionals. *Front Pediatr*. 2020;8:572933. doi:10.3389/fped.2020.572933
12. Yenal K, Tektaş P, Dönmez A, Okumuş H. Perinatal loss: experiences of midwives and nurses. *Omega (Westport)*. 2023;87(4):1174-1188. doi:10.1177/00302228211029143
13. Loughnan S, Bakhbakhi D, Ellwood DA, et al. Support for parents and families after stillbirth and neonatal death. *Cochrane Database Syst Rev*. 2024;11(11):CD015798. doi:10.1002/14651858.CD015798
14. Vig PS, Lim JY, Lee RWL, et al. Parental bereavement - impact of death of neonates and children under 12 years on personhood of parents: a systematic scoping review. *BMC Palliat Care*. 2021;20(1):136. doi:10.1186/s12904-021-00831-1
15. Wong JQH, Charles JS, Mok HT, Tan TSZ, Amin Z, Ypm N. Experiences of healthcare personnel with death in the neonatal intensive care unit: a systematic review of qualitative studies. *Arch Dis Child Fetal Neonatal Ed*. 2023;108(6):617-622. doi:10.1136/archdischild-2023-325566
16. Bloomer MJ, Brooks LA, Coventry A, Ranse K, Rowe J, Thomas S. "You need to be supported": an integrative review of nurses' experiences after death in neonatal and paediatric intensive care. *Aust Crit Care*. 2025;38(3):101149. doi:10.1016/j.aucc.2024.101149
17. Creswell JW, Poth CN. *Qualitative Inquiry and Research Design: Choosing among Five Approaches*. 4th ed. Sage Publications; 2018.
18. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *Int J Qual Health Care*. 2007;19(6):349-357. doi:10.1093/intqhc/mzm042
19. Handcock MS, Gile KJ. Comment: on the concept of snowball sampling. *Sociol Methodol*. 2011;41(1):367-371. doi:10.1111/j.1467-9531.2011.01243.x
20. Hennink MM, Kaiser BN. Sample sizes for saturation in qualitative research: a systematic review of empirical tests. *Soc Sci Med*. 2022;292:114523. doi:10.1016/j.socscimed.2021.114523
21. Rahimi S, Khatooni M. Saturation in qualitative research: an evolutionary concept analysis. *Int J Nurs Stud Adv*. 2024;6:100174. doi:10.1016/j.ijnsa.2024.100174
22. Vaismoradi M, Jones J, Turunen H, Snelgrove S. Theme development in qualitative content analysis and thematic analysis. *J Nurs Educ Pract*. 2016;6(5):100-110. doi:10.5430/jnep.v6n5p100
23. Coleman P. Validity and reliability within qualitative research for the caring sciences. *Int J Caring Sci*. 2021;14(3):2041-2045.
24. Noble H, Smith J. Issues of validity and reliability in qualitative research. *Evid Based Nurs*. 2015;18(2):34-35. doi:10.1136/eb-2015-102054
25. Carter N, Bryant-Lukosius D, DiCenso A, Blythe J, Neville AJ. The use of triangulation in qualitative research. *Oncol Nurs Forum*. 2014;41(5):545-547. doi:10.1188/14.ONF.545-547
26. Laing RE, Fetherston CM, Morrison P. Responding to catastrophe: a case study of learning from perinatal death in midwifery practice. *Women Birth*. 2020;33(6):556-565. doi:10.1016/j.wombi.2020.02.016
27. Khalaf IA, Al-Dweik G, Abu-Snieneh H, et al. Nurses' experiences of grief following patient death: a qualitative approach. *J Holist Nurs*. 2018;36(3):228-240. doi:10.1177/0898010117720341
28. Gao Y, Wu L, Zhou L, Liu Y, Zhang Y, Huang Y. Compassion fatigue among nurses in neonatal intensive care units: a cross-sectional study. *BMC Nurs*. 2025;24(1):88. doi:10.1186/s12912-025-03385-2
29. Hagen IH, Fjell A, Hansen MB, Nødtvedt MW, Gjerland A, Moltu C. Compassion fatigue among nurses in neonatal intensive care units: a qualitative study. *BMC Nurs*. 2025;24(1):38. doi:10.1186/s12912-025-03385-2
30. Pires LDC, Costenaro RGS, Gehlen MH, Pereira A, Hausen CF, Neves ET. Parental bereavement: experiences of the nursing staff in neonatal intensive care. *Cogitare Enfermagem*. 2023;28:e86643.
31. Dalazen GC, Conte Gil PH. Emotional (un)availability in the face of neonatal death in a nursing team. *J Contemp Nurs*. 2024;13:e5824. doi:10.17267/2317-3378rec.2024.e5824
32. Köktürk DB, Can Ş, Durgun H. Emotional responses of neonatal intensive care nurses to neonatal death. *Omega (Westport)*. 2022;85(2):497-513. doi:10.1177/0030222820971880
33. Anguis Carreño M, Marín Yago A, Jurado Bellón J, Baeza-Mirete M, Muñoz-Rubio GM, Rojo Rojo A. an exploratory study of icu pediatric nurses' feelings and coping strategies after experiencing children death. *Healthcare (Basel)*. 2023;11(10):1460. doi:10.3390/healthcare11101460
34. Medeiros JA, Almeida Júnior JJ, Oliveira LPBA, Silva FRSD, Silva CCDS, Barros WCTDS. Death and dying of newborns and children: relationships between nursing and family according to travelbee. *Rev Bras Enferm*. 2021;75(2):e20210007. doi:10.1590/0034-7167-2021-0007
35. Barr P. Moderating effects of coping styles on the relationship between nursing stress and mental health among NICU nurses. *J Obstet Gynecol Neonatal Nurs*. 2025;54(3):288-297. doi:10.1016/j.jogn.2024.12.006
36. Demirbağ S, Akan DD, Baysal E. On between death and life: intensive care nurses. *Omega (Westport)*. 2024;89(4):1714-1735. doi:10.1177/00302228231198575
37. Han S, Min H, Kim S. NICU nurses' moral distress surrounding the deaths of infants. *Nurs Ethics*. 2023;30(2):276-287. doi:10.1177/09697330221134978
38. Garten L, Danke A, Reindl T, Prass A, Bührer C. End-of-life care related distress in the PICU and NICU: a cross-sectional survey in a German tertiary center. *Front Pediatr*. 2021;9:709649. doi:10.3389/fped.2021.709649
39. Levido A, Keogh S, Jarrett P, Crowe L, Coyer F. Proactive debriefing to promote wellbeing in intensive care nurses: a protocol. *Aust Crit Care*. 2024;37(4):621-627. doi:10.1016/j.aucc.2024.01.004
40. Elsharkawy NB, Ramadan OME, Hafiz AH, et al. Resilience in the shadows of loss: a hermeneutic phenomenological study of neonatal intensive care nurses' coping after infant loss in Saudi Arabia. *BMC Nurs*. 2025;24(1):822. doi:10.1186/s12912-025-03509-8
41. Butcher I, Morrison R, Balogun O, et al. Burnout and coping strategies in pediatric and neonatal intensive care staff. *Clin Pract Pediatr Psychol*. 2024;12(1):16-30. doi:10.1037/cpp0000474
42. Metallinou D, Bardo S, Kitsonidou I, Sotiropoulou N. Attitudes and experiences towards death of healthcare professionals working in neonatal intensive care units. *Omega (Westport)*. 2023;88(2):570-590. doi:10.1177/00302228211048667
43. André B, Dahlø R, Eilertsen T, Shorey S, Ringdal GI. Experiences with perinatal death among midwives, obstetricians, and assistant nurses: results from

a qualitative study in Norway. *Int J Health Prof*. 2020;7(1):24-32. doi:10.2478/ijhp-2020-0003
44. Ravaldi C, Mosconi L, Mannetti L, et al. Post-traumatic stress symptoms and burnout in healthcare professionals working in neonatal intensive care units: results from the STRONG study. *Front Psychiatry*. 2023;14:1050236. doi:10.3389/fpsyt.2023.1050236
45. Carton AM, Steinhardt K, Cordwell J. Exploring factors which contribute to the resilience of nurses working in the neonatal care unit: a grounded theory study. *Intensive Crit Care Nurs*. 2022;68:103137. doi:10.1016/j.iccn.2021.103137
46. Fernández-Alcántara M, Schul-Martin L, García Caro MP, Montoya-Juárez R, Pérez-Marfil MN, Zech E. 'In the hospital there are no care guidelines': experiences and practices in perinatal loss in Spain. *Scand J Caring Sci*. 2020;34(4):1063-1073. doi:10.1111/scs.12816
47. Paraíso Pueyo E, González Alonso AV, Botigué T, Masot O, Escobar-Bravo MÁ, Lavedán Santamaría A. Nursing interventions for perinatal bereavement care in neonatal intensive care units: a scoping review. *Int Nurs Rev*. 2021;68(1):122-137. doi:10.1111/inr.12659
48. Griffin CMDC, Pamponet JM, Bella VB, Foronda G, Azzi SGF, Gonçalves PA. The impact of approaching grief on the neonatal team: professional experience report. *Einstein (Sao Paulo)*. 2022;20:eRC6698. doi:10.31744/einstein_journal/2022RC6698
49. Hawes K, Goldstein J, Vessella S, Tucker R, Lechner BE. Providing support for neonatal intensive care unit health care professionals: a bereavement debriefing program. *Am J Perinatol*. 2022;39(4):401-408. doi:10.1055/s-0040-1716481
50. Huang H, Toh RQE, Chiang CLL, et al. Impact of dying neonates on doctors' and nurses' personhood: a systematic scoping review. *J Pain Symptom Manage*. 2022;63(1):e59-e74. doi:10.1016/j.jpainsymman.2021.07.002