

Preventing Newborn Falls and Improving Care for Postpartum Women and Their Newborns

Carl Seashore, MD,^a Kristin P. Tully, PhD^b

In their article, “Newborn Falls in a Large Tertiary Academic Center Over 13 Years,” Loyal et al¹ report a retrospective review of newborn falls at a hospital birthing facility over a period of >10 years. This study is important because it reveals a problem that has recently garnered attention from The Joint Commission as being one that is not sufficiently understood.² Birth is the most common reason for hospitalization in the United States, and although newborn falls are uncommon, it is a serious adverse event for patients, parents, and hospital staff when they do occur. Falls among hospitalized adults are ~10- to 20-fold more common than falls among newborns, with the former having an occurrence rate of 3.56 falls per 1000 patient days, according to the authors of a recent study.³ In the study reported in this issue, the authors found a fall rate of 4.6 falls per 10 000 live births, or ~2 falls per 10 000 patient days. Although the rate of infant falls during postpartum hospitalization is comparatively small, anyone who has experienced a newborn fall is well aware of the distress and potential harm that are caused when this does occur. We as clinicians and hospital administrators want to implement every step feasible to reduce the risk of patient harm.

Characteristics of the newborns who fell are elucidated along with the work of a multidisciplinary task force to prevent newborn falls. The most striking findings include the association of falls with an infant’s location in a maternal hospital bed or on a couch, occurrence during overnight hours, and lack of a support person in the hospital with the mother–infant dyad when the falls occurred. Fall rates among breastfeeding infants were equal to the hospital’s reported breastfeeding rate, suggesting that the realization of safer sleep practices is the most important modifiable variable when aiming to decrease falls. Importantly, the authors of the study also highlight a disparity in which mothers without a support person present were more likely to have infants who fell. The study review period started in 2005 after a series of sentinel events that brought about awareness of the problem and continued to include the period of time during which the hospital administration pursued and received Baby-Friendly USA (BFUSA) designation in 2016 and beyond. Overall, their fall rate decreased slightly but not significantly over this time period, with the lowest fall rate occurring in the year during which they were preparing for BFUSA designation.

www.hospitalpediatrics.org

DOI:<https://doi.org/10.1542/hpeds.2018-0121>

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Address correspondence to Carl Seashore, MD, Division of General Pediatrics and Adolescent Medicine, University of North Carolina at Chapel Hill, 231 MacNider Hall, CB 7225, Chapel Hill, NC 27599. E-mail: seashore@unc.edu

HOSPITAL PEDIATRICS (ISSN Numbers: Print, 2154-1663; Online, 2154-1671).

FREE

FINANCIAL DISCLOSURE: The authors have indicated they have no financial relationships relevant to this article to disclose.

FUNDING: No external funding.

POTENTIAL CONFLICT OF INTEREST: Drs Tully and Seashore are investigators on projects (IHHAR41602–UL1TR001111) to design and develop an innovative postnatal unit infant bassinet. This project is also supported by the Carolina Global Breastfeeding Institute and the Gillings Entrepreneurship Award

Dr Seashore drafted the commentary; Dr Tully made significant contributions and changes to the final document; and both authors agreed with the commentary in its final form and approved the final manuscript as submitted.

Opinions expressed in these commentaries are those of the authors and not necessarily those of the American Academy of Pediatrics or its Committees.

^aDepartment of Pediatrics, School of Medicine, and ^bCarolina Global Breastfeeding Institute, Gillings School of Global Public Health, University of North Carolina at Chapel Hill, North Carolina

With these findings, we identify several areas of potential focus for hospitals to prevent newborn falls (Table 1). The first step is to measure outcomes, as these authors did, with both anonymous and open reporting systems. Additionally, a better understanding of the factors contributing to unsafe infant handling practices can also inform anticipatory guidance. Researchers conducting prospective studies with providers and families might include the integration of video observation and interviews to gain a deeper insight into the constraints that contribute to and the rationale of underlying risk behaviors. The second step in risk reduction is to communicate and model safer sleep practices, as highlighted by the creators of the State of Connecticut's required sleep positioning and environmental training for birth hospitals in that state. On a national level, the National Action Partnership to Promote Safe Sleep is currently developing in-hospital postpartum sleep safety bundles, including the advancement of a conversation-based approach to risk reduction.⁴ Similarly, our own mother–infant unit received a Safe Sleep recognition from our state agency as a part of our approach to fall prevention.⁵ The third interrelated step for safeguarding newborns from both falls and accidental suffocation is to enhance the support infrastructure around new mothers. Many women do not have a supportive partner who is able to stay at the hospital overnight. Family members may be at home caring for older children, unable to miss work, or deployed, or there may be no partner or other key individual available. Additionally, women who are feeling vulnerable after childbirth, from a lower socioeconomic background, or navigating language barriers may not request the help they need in the postnatal unit. Community-based doula programs and other similar resources may

be used to assist new mothers with this health equity issue as a complement to nursing care. Although there are risks from a lack of skin-to-skin care and continuous rooming-in, the most appropriate postnatal unit arrangement at times of significant maternal conditions (ie, magnesium sulfate) may include a period of nurse observation of the infant outside the mother's room if other options are not available, a practice that is consistent with BFUSA guidelines and evaluation criteria.⁶

The fourth step to both reduce infant falls and promote more patient-centered care is the consideration of the systems of care in postpartum units across the country. For example, current infant bassinets are designed to accommodate nurses and doctors more so than new parents. The structure of a bassinet (high walls) does not foster physical contact between a mother and an infant, especially in the setting of limited mobility due to pain after a cesarean delivery or complications with a vaginal delivery. BFUSA designation is increasing in US hospitals, with 526 hospitals in the United States now designated, representing slightly >25% of US births.⁷ Tully and Ball⁸ and others who have evaluated “sidecar” bassinets in Europe have shown promise that these or other innovative hospital bassinets may help promote the realization of breastfeeding goals and safer infant handling during the postpartum stay. We are part of a multidisciplinary team that is working on developing such a device, which we hope will facilitate a mother's ability to implement safe sleep practices and subsequently decrease falls among newborns during the birth hospitalization. As importantly, an objective of reengineering postnatal unit care around the needs of new families is to holistically support women in becoming mothers.⁹ Design is not neutral, including in health services.

Newborn falls are rare but significant tragic events. More studies of both near misses and adverse outcomes are needed to inform multilevel approaches to preventing newborn falls. Supporting new mothers and their infants to have an optimal postpartum recovery is 1 of the best investments that can be made toward improving human

health. Preventing falls is an important aspect of that work, along with support for breastfeeding, education, modeling around safer sleep, and ensuring that new parents have the tools they need to confidently take home their new infant and learn to grow and thrive together.

REFERENCES

1. Loyal J, Pettker CM, Raab CA, O'Mara E, Lipkind HS. Newborn falls in a large tertiary academic center over 13 years. *Hosp Pediatr*. 2018;8(9):e20180021
2. The Joint Commission. Preventing newborn falls and drops. Available at: www.jointcommission.org/assets/1/23/Quick_Safety_Issue_40_2018_Newborn_falls_drops.pdf. Accessed June 14, 2018
3. Bouldin EL, Andresen EM, Dunton NE, et al. Falls among adult patients hospitalized in the United States: prevalence and trends. *J Patient Saf*. 2013;9(1):13–17
4. National Institute for Children's Health Quality. Initiatives: National Action Partnership to Promote Safe Sleep Improvement and Innovation Network (NAPPSS-IIN). Available at: www.nichq.org/project/national-action-partnership-promote-safe-sleep-improvement-and-innovation-network-nappss. Accessed June 15, 2018
5. North Carolina Healthy Start Foundation. Current models of excellence. Available at: www.nchealthystart.org/resources/infant-sleep-safety/models-of-excellence/. Accessed June 14, 2018
6. Baby-Friendly USA. The guidelines and evaluation criteria. Available at: www.babyfriendlyusa.org/get-started/the-guidelines-evaluation-criteria. Accessed June 15, 2018
7. Baby-Friendly USA. Find facilities. Available at: www.babyfriendlyusa.org/find-facilities. Accessed June 14, 2018
8. Tully KP, Ball HL. Postnatal unit bassinet types when rooming-in after cesarean birth: implications for breastfeeding and infant safety. *J Hum Lact*. 2012;28(4):495–505
9. UNC Gillings School of Global Public Health. CGBI: couplet care bassinets. Available at: www.sph.unc.edu/cgbi/hospital_infant_bassinet/. Accessed June 14, 2018

TABLE 1 Suggested Approaches To Decrease Newborn Falls

1. Report and measure newborn falls.
2. Engage in safer sleep training programs for hospital staff and new parents.
3. Enhance the support infrastructure for new mothers and families.
4. Evaluate systems of care, including equipment design, to promote optimal infant handling.

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Hospital Pediatrics 2018;8;593

DOI: 10.1542/hpeds.2018-0121 originally published online August 1, 2018;

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