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Editorial

EDITORIAL

A call for a "Sleep-Friendly" designation in hospitals

Nicola M. Orlov[1,2,*] and Vineet M. Arora[3]

[1]Pritzker School of Medicine, University of Chicago, Chicago, IL, USA, [2]Section of Hospital Medicine, Department of Pediatrics, University of Chicago Medical Center, Chicago, IL, USA and [3]Section of General Internal Medicine, University of Chicago Medical Center, Chicago, IL, USA

*Corresponding author: Nicola M. Orlov, The University of Chicago Medicine, 5721 S. Maryland Avenue – MC 8000, Chicago, IL 60637, USA. Email: norlov@bsd.uchicago.edu.

For children, sleep is essential for normal growth and development, and critical to healing during acute illness. Nonetheless, sleep quality and quantity are often poor for pediatric patients during periods of hospitalization. Hospital sleep disruptions not only increase the risk of significant negative health outcomes for the patient, but data suggest hospital sleep disruptions also affect caregivers. Parents who experience poor sleep quality during a child's hospitalization report impaired cognitive function, difficulty with emotional regulation, and challenges with medical decision-making after discharge [1]. Similarly, parents who experience disrupted sleep during hospitalization reported feeling more weary, sad, and worse overall [2]. In recent years, researchers have begun to focus attention on identifying disruptors to sleep for patients in pediatric care admitted to the general medicine wards. This heightened awareness of factors that disrupt sleep has also resulted in increased efforts to improve quality resting time during hospitalizations for children. While small pilot studies have proposed remedies for disrupted hospital sleep, few larger studies have looked more broadly at the problem and possible solutions. In this month's article by Fidler *et al.*, the authors synthesized the breadth of the existing literature, along with recommendations for a conceptual model that can be used in the future to support the evidence-based practice of optimizing sleep [3].

Fidler *et al.* aimed to identify the factors that impact sleep for hospitalized children on the general medicine wards and to determine the effectiveness of existing interventions [3]. The outcomes from their work highlight two well-described realities: (1) the hospital environment is teeming with sleep disruptors and (2) changing care practices and hospital procedures is difficult. More specifically, Fidler *et al.* conducted a qualitative analysis on 45 articles and found that the primary source of sleep disruptions was care practices and hospital systems, such as routine vital sign checks, care team interruptions, and medication administration; additional environmental disruptors included light and noise. Despite finding that environmental and hospital practices are the largest disruptors to patient sleep, their review found that 88% (n = 9) of the sleep-promoting interventions targeted the patient with relaxation focused techniques (exclusively or bundled with other interventions), and only one focused exclusively on the environmental disruptors [3]. As a result, among the authors' conclusions was a declaration of the need for future randomized controlled trials to document the prospective impact of interventions, and a call for future intervention to focus more directly on eliminating the hospital-related environmental sleep disruptors.

The authors are not alone in recommending optimization of the hospital environment in support of sleep. The American Academy of Nursing, as part of their Choosing Wisely™ Campaign, states that in the hospital, we should not disturb a patient's sleep "unless the patient's condition or care specifically requires it" [4]. Similarly, in 2018, sleep-promoting programs for inpatients were added to the top "to-do" practices for hospitals on the Right Care Recommendations list [5]. Additionally, the National Sleep Foundation recently released a Statement on Sleep Health Equity and noted the critical importance of prioritizing sleep as a step toward improving the health of underrepresented members of our society [6].

Given these recommendations from multiple organizations, relatively few interventions exist to support the sleep of pediatric patients during hospitalization, and those that do exist target relaxation techniques for the patient, rather than the hospital environment. Although the reason interventions are largely concentrated at the patient level was neither explained by individual authors nor explored by Fiedler *et al.*, the most likely rationale is that care habits and hospital systems are extremely

difficult to modify. Care practices, such as checking vital signs throughout the night on every patient is not evidence-based, dates back to the time of Florence Nightingale, and continues to remain the most common default monitoring practice in all patients regardless of patient acuity [7]. Despite efforts to impact these practices with quality improvement projects, sustainability is difficult and the removal of this all-to-common barrier to sleep remains challenging [8].

So how can we improve the sleep of hospitalized patients? The Baby-Friendly Hospital Initiative (BFHI), which aimed to increase breastfeeding initiation, has a lot to teach us and can be used as an archetype of how to improve sleep in hospitalized patients in pediatric care. With the well-recognized health benefits of breastfeeding yet the low rates of breastfeeding within the United States, the WHO and UNICEF developed 10 steps that hospitals should adhere to in order to promote successful breastfeeding after delivery. The steps identified were documented in the literature as having increased adherence and have become best practices for hospitals aiming to improve breastfeeding rates and infant health [9]. Since the initiation of the campaign in the early 1990s, more than 20 000 birthing institutions in 150 countries have achieved Baby-Friendly status [10]. The ability to impact such widespread change, despite the influence of formula companies and long-standing practices, attests to the value and importance of governing bodies setting standards of care.

With a recent rise in attention toward the importance of sleep during hospitalization and Kotter's 8-Step process as a guide for leading change in the hospital environment, the time is ripe for improving sleep for both children and their caregivers admitted to the hospital [11]. Governing bodies such as The Center for Disease Control and Prevention, The Society for Hospital Medicine, The Agency for Healthcare Research and Quality, and The National Sleep Foundation need to create urgency so that more funding and research can identify interventions aimed at eliminating these disruptors. These key stakeholders can serve as a guiding coalition to develop best practices that hospitals can use to prioritize patient sleep.

Kotter's 8-Step process can guide the creation of a "Sleep-Friendly" designation that would help motivate the cultural shift that both hospitals and patients need [12]. Ultimately, if it is only costs that facilitate change, creating a sleep-friendly environment can directly improve reimbursement for hospitals since the Child Hospital Consumer Assessment of Healthcare Providers and Systems (Child HCAHPS) patient satisfaction survey directly asks patients about the noise levels at night. With improved ratings on the "quiet at night" question, ratings and reimbursement increase. Additionally, the de-escalation of unnecessary care for low-risk patients can allow for reallocation of nursing time to the higher-acuity patients who require it most [13]. This change can increase the impact, value, and flow of nursing care throughout the night and their perception of value when their efforts are justified, rather than solely informed through habit. Finally, optimizing sleep when a patient is hospitalized is patient-centered. We understand that the core value of patient-centered care is realigning care plans so that we can focus on an individual's clinical, emotional, spiritual, and comfort needs. Few things heal a person physiologically, emotionally, and spiritually more than sleep. When an outcome improves reimbursement, improves workflow, and most importantly, improves health and patient-centeredness, it is hard to see why there would not be consensus and urgency around advancing these changes.

Disclosure Statement

None declared.

References

1. Stickland A, *et al*. A qualitative study of sleep quality in children and their resident parents when in hospital. *Arch Dis Child*. 2016;**101**(6):546–551. doi:10.1136/archdischild-2015-309458
2. Fidler AL, *et al*. A systematic review and proposed conceptual model of sleep disturbances during pediatric hospitalizations. *Sleep*. 2022 Feb 18;zsac038. doi:10.1093/sleep/zsac038. Online ahead of print.
3. American Academy of Nursing | Choosing Wisely. Twenty-five things nurses and patients should question. 2015. https://www.choosingwisely.org/societies/american-academy-of-nursing/. Accessed March 2, 2022.
4. Wright R. About – Baby-Friendly USA. https://www.babyfriendlyusa.org/about/. Accessed March 2, 2022.
5. Harvard T.H. Chan School of Public Health | Executive and Continuing Professional Education. Change Management: Why It's So Important, and So Challenging, in Health Care Environments. https://www.hsph.harvard.edu/ecpe/change-management-why-its-so-important-and-so-challenging-in-health-care-environments/. Accessed March 2, 2022.
6. Cook DJ, *et al*. Improving hospitalized children's sleep by reducing excessive overnight blood pressure monitoring. *Pediatrics*. 2020;**146**(3):e20192217. doi:10.1542/peds.2019-2217
7. NSF-Position-Statement_Sleep-Health-Equity.pdf. https://www.thensf.org/wp-content/uploads/2022/01/NSF-Position-Statement_Sleep-Health-Equity.pdf. Accessed February 16, 2022.
8. Cho HJ, *et al*. Right care in hospital medicine: co-creation of ten opportunities in overuse and underuse for improving value in hospital medicine. *J Gen Intern Med*. 2018;**33**(6):804–806. doi:10.1007/s11606-018-4371-4
9. Hughes V. The baby-friendly hospital initiative in US hospitals. *Infant Child Adolesc Nutr*. 2015;**7**(4):182–187. doi:10.1177/1941406415592671
10. Munn AC, *et al*. The impact in the United States of the Baby-Friendly Hospital Initiative on early infant health and breastfeeding outcomes. *Breastfeed Med*. 2016;**11**(5):222–230. doi:10.1089/bfm.2015.0135
11. Riehm JM, *et al*. The impact of the COVID-19 pandemic on nighttime room entries and sleep disruptions for pediatric patients. *Sleep Med*. 2021;**84**:76–81. doi:10.1016/j.sleep.2021.05.020
12. Kotter J. The 8-Step Process for Leading Change. https://www.kotterinc.com/8-step-process-for-leading-change/. Accessed March 2, 2022.
13. Orlov NM, *et al*. Things we do for no reason™: routine overnight vital sign checks. *J Hosp Med*. 2020;**15**(5):272–273. doi:10.12788/jhm.3442