

# Safe or Sorry? Risk Reduction and Humanism in Newborn Medicine

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Is my infant safer with a nanny or in day care? Which car seat is the safest choice for our family? New parents are confronted with a barrage of decisions that require them to balance risks and benefits. In the era of coronavirus disease 2019, decision-making regarding risk reduction and safety has been in the limelight more than ever. Some families tolerate risk for potential benefit, whereas others prioritize risk reduction; this is often informed by their personal situation, family history, and cultural and socioeconomic background. Physician recommendations on risk reduction are guided by physiology, training, and practice standards. However, they are also influenced by a myriad other factors, including our own biases, risk tolerance, experience with clinical sentinel events, and social power imbalances.

Risk analysis in the newborn period is especially challenging. It requires new parents to face previously unknown situations during a stressful time, as they discover how to care for both themselves and their uniquely vulnerable infant. This article discusses 3 common newborn topics, fever, sleep, and jaundice, and reflects on how medical advice regarding risk during this period can be profoundly impactful. We explore how physicians can compassionately communicate with families regarding risk reduction and improve family-centered medical decision-making.

## FEVER

“Doctor, is it okay to have visitors around the infant? Should they wear masks? His big sister is sick, is that okay?” As a doctor, my guidance to these common questions is focused on prevention of admission for fever in a neonate, invasive diagnostics including lumbar puncture, and the rare but potentially catastrophic possibility of bacterial meningitis.

As a mother, when I hear these questions, I think of my own family’s efforts to reduce risk of infectious exposure after my daughter was born very early in the pandemic. Before vaccines were available and when maximum precautions were recommended, we chose to limit family to brief visits outdoors in the first month of my daughter’s life. However, attempting to eliminate risk had a humanistic cost. My husband and I were alone on a figurative island with 2 young children, sleep deprived, stressed, and without the support system that had kept us afloat in the past. My children’s grandparents missed out on irreplaceable moments, holding

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and loving a new infant in its first days of life. We made the best decision we could at the time, and although I am still fairly risk-averse, this experience influences my perspective.

Although admission for fever in a neonate is a common event, bacterial meningitis is quite rare,<sup>1</sup> and fever in a neonate recommendations have evolved significantly in the last few years.<sup>2</sup> How should we share the nuances of this data with families? How can we empower families to join us in consensus-based decision-making that is both within the spectrum of best practices while also incorporating their values?<sup>2</sup> The risks of newborn infection should be shared, but also contextualized.

## SLEEP

I always thought to myself, “You survived residency . . . you’ll be fine with a newborn.” Famous last words. Pediatricians transition to an interesting place after the birth of our children. Suddenly, a world where you previously guided families as an expert is yours to experience firsthand as a novice.

It was the second night of having my first infant home after 10 days in the NICU. By discharge, her umbilical stump had already come off, we had extra practice at diapers and swaddling, and I had an established milk supply and plan for home. I thought we were set. Fast-forward to the out-of-body experience of my husband frantically shaking me at 2 AM saying, “Wake up!” as we realized that I had drifted asleep while breastfeeding in bed. After I had ingrained in him the dangers of cosleeping (also referred to as bed-sharing) and best safe sleep practices<sup>3,4</sup> leading up to our daughter’s birth, his face said it all.

Although seldom discussed by physician parents, I know I am not alone in my experience with unintentional cosleeping. When rounding on my newborn service now, as a mother of 2, how do I approach a parent who I find cosleeping when I enter the room? I personally have experienced the exhaustion they are feeling; was this an accidental occurrence

or an intentional choice, and does that influence my approach? Blanket rejection of cosleeping does not acknowledge the culturally contextualized spectrum of home sleep choices that exists, often despite knowledge of the risks. How do I integrate my personal experience as a fatigued mother waking every few hours into these discussions to protect others from unintentional cosleeping? Is it possible to acknowledge this very personal experience without contradicting my physician knowledge about cosleeping risks? How does safety data affect my guidance for a term, breastfed infant in a nonsmoking household?<sup>5</sup>

## JAUNDICE

“When is your follow-up appointment?” It is discharge day, and the sleepy, early term infant is down 9% and has an elevated bilirubin. The first-time mother really wants to avoid formula as she waits for her milk to arrive. Her follow-up appointment is in 3 days, as the office is closed over the weekend.

Jaundice, with tidy risk-stratification and evidence-based numerical thresholds for each hour of life, seems like a straightforward part of newborn rounds. But there is a lot to consider when forming a follow-up plan.<sup>6</sup> Is the latch going well enough to avoid supplementation or the complexities of the pump? What home breastfeeding support is available? When should they follow up, and how is that influenced by weather, transportation, and the level of parental experience? Some physicians might delay discharge to repeat laboratories or even initiate a few hours of phototherapy under the prescribed threshold, to avoid a potential readmission. Maybe these bilirubin numbers are not so tidy.

I think back to my own devotion to breastfeeding in the first days at home, syringe feeding drops of colostrum to my first infant as I got engorged and nipple blisters worsened. Nine years and 3 infants later, I wish I had been more flexible. I will choose what personal retrospective wisdom I share, and for some patients, introduce data showing

that small-volume formula supplementation may actually increase her eventual breastfeeding success and simultaneously improve the infant’s jaundice.<sup>7</sup> The recommendations I make to this new mother, standing before me with car seat in hand, must be both clinically sound and sensitive to the emotionally and physically challenging postpartum days ahead. Our medical advice to parents on jaundice, formula, and follow-up must balance the humanistic impact of our recommendations with relative risk.

## DISCUSSION

Bogardus et al (1999) describes the 5 dimensions of decision-making about risk.<sup>8</sup> The first 4 dimensions, including type, permanence, timing, and probability of risk, are within the physician domain. The fifth, the relative value or importance of the risk to the patient, inherently requires the patient and family perspective and optimal communication.

Previous research has identified a cognitive bias toward protocolizing risk-based decisions.<sup>9</sup> Although it may be simpler to always require a child with an elevated bilirubin to follow up in 48 hours, excessive dependence on cognitive shortcuts may lead to the exclusion of family preferences and individual circumstances. Protocol-based risk reduction may work well for simple situations, but it performs poorly in nuanced scenarios where risks and benefits must be balanced.<sup>9</sup>

Risk discussions should incorporate both physician experience and family perspective. We should strive to counsel using our scientific knowledge and clinical experience, while acknowledging relative risks and incorporating the family’s perspective. When it is appropriate, we should provide a spectrum of reasonable options for families to consider on the basis of their circumstances and priorities. These steps reflect the ethical principle of autonomy, and although pediatric ethics have their own complexities,<sup>10</sup> autonomy should not be overshadowed by the sometimes patriarchal culture of medicine.

Prescriptive advice is often warranted and sometimes desired by parents. However, we can let well-informed parents make appropriate decisions for their family. Even the clinical practice guidelines for management of febrile infants recommend incorporating shared decision-making when appropriate.<sup>2</sup>

For optimal medical care tailored to each patient, the “in-between” sometimes must be addressed. Which is riskier, instructing a family on best practices for safe sleep and ignoring signals that they will not be following guidelines, or recognizing their choices and discussing strategies to make safer decisions? Avoiding absolutist language (“you must,” “you cannot”) and brainstorming compromise is likely to support a more honest doctor–patient relationship.<sup>11</sup> In an environment of scientific skepticism, our relationship with our patients thrives when we acknowledge and respect parental values and save unilateral recommendations for high-priority topics with well-supported recommendations. It is in these safe conversations that trust is gained and the likelihood of adherence to recommendations is improved.

Attempting to eliminate risk for children might seem appealing; however, the pandemic has reminded us that

eliminating risk has never been possible and attempting to do so can carry its own costs. Our individual humanistic experiences can help us connect with patient families, better understand what is important to them, and make the difference between what is heard and what is ultimately adopted.

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