

## Dropped Babies – When is a Fall Not a Fall?

*Baby Janie, Betsy and John Smith's first child was not yet 24 hours old when she fell out of her mother's arms.\* She dropped onto the floor, hitting her head. (See below for full description of this case.)*

When health care providers and managers worry about risk in caring for newborns, we usually think of the risks of pregnancy and the birth process, newborn jaundice, and infection. If pushed, we might also add security issues around infant abduction. We are unlikely, however to consider the risk of falls to newborns and infants. Despite the safety focus on fall prevention and management in hospitals and long-term care, falls in newborns is only now emerging as part of a national conversation. In fact, the August 2008 issue of Pediatrics includes the only article regarding this issue<sup>1</sup> we have found in the literature.

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### Comment

Providence Women & Children's Program of Oregon has taken a deeper look at instances of newborn falls and is raising the issue as an under recognized risk. A record review over the previous 2 1/2 years showed, that yes, newborn falls occurred a number of times (usually off the bed while with the mother). While most of these were low harm, two resulted in skull fractures. The hospital considered this a significant safety issue and began to investigate. Almost immediately, they discovered two barriers to reporting such events. The first is a matter of language and perception; staff usually respond in the negative when queried about newborn falls, but if specifically asked about mothers falling asleep and the babies falling from her bed, the response is "Oh, yes." The second barrier is normal parental guilt and embarrassment about the drop, which is liable to keep some events from being reported.

Their investigation also identified that the situations in which a newborn was dropped are of generally two types, related to the following:

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\* Minor changes have been made to assure patient anonymity and to clarify certain aspects of the situation.

<sup>1</sup> Monson, S. A., Henry, E., Lambert, D. K., Schmutz, N., & Christensen, R. D. (2008) In-hospital falls of newborn infants: Data from a multihospital health care system. Pediatrics 122, e277-e280.

- Sleep: Mom, (or sometimes Dad, or other family member) is holding the newborn in bed or a rocking chair and falls asleep; the baby then slips out from their relaxed arms and drops/falls to the floor. While encouraged by some experts, [co-sleeping](#)<sup>2</sup> remains controversial in the US and newborn drops identified by this hospital, included drops from the bed when the mother fell asleep.
- Equipment: Person holding the baby becomes tangled in IV lines and trips; twins are placed on a [nursing pillow](#)<sup>3</sup> and when one is picked up, the other falls off onto the floor.

The hospital also identified a third situation in which a newborn might be dropped — during the birth process. While the hospital has not had any cases of newborns dropped during delivery, this possibility deserves attention in developing prevention strategies.

A basic patient safety precept is that strong harm prevention requires not only individual vigilance, but also system processes that hardwire protective measures. Any harm from expected failures of vigilance is then prevented or mitigated. To develop those protective measures requires, first, recognition that certain processes or situations carry risk. This is not as easy as it might first seem — health care professionals routinely work in high risk situations. Over time, they become accustomed to risk to the point of not being able to see it anymore. When the situation is a normal one, such as on a Mother-Baby unit the quality of care concern with parent-child bonding may take precedence, overriding recognition of a potential risk.

*Risk Recognition* – In a hospital’s Mother-Baby unit, with healthy newborns and their mothers, Mom and baby in bed together is a normal situation. In fact, promoting parental bonding is a quality of care concern. Therefore, it does not trigger a red flag for risk. In addition, while a baby might drop from the bed, it is an unusual event; so again, the red flag is not triggered. Even if the baby drops to the floor, serious injury is rare, so yet again, the event does not trigger a red flag.

The presence of a risk, its frequency, and its severity all play into whether or not it is recognized and acted upon. For hospital staff, responding to high visibility health problems and risks, these “normal” situations fall under the radar screen. Any minor, infrequent adverse events that do occur become part of the background context, an example of what is called normalized deviance.<sup>4</sup> In this way, the risk - albeit small - associated with newborns falling from beds can easily go unrecognized.

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<sup>2</sup> Co-sleeping (or the family bed) is when babies and children sleep with one or both parents. It is common outside of Western countries and is becoming more common in the US where it is said to promote bonding, facilitate breast-feeding and increase parents’ sleep. Risks associated with the practice include suffocation.

<sup>3</sup> A pillow used as support for the baby while nursing. It is usually U-shaped and available for single infants or twins.

<sup>4</sup> Normalized deviance is the gradual acceptance of slight risk or slightly lower quality (e.g. shortcuts) until the lower standard becomes the usual practice.

A tool that may be helpful in recognizing the importance of any single adverse event is available from the [VA National Center for Patient Safety](#). It is a matrix for determining which events should be investigated further based on potential severity and frequency. Even minor events are evaluated using this tool, (the [SAC Matrix](#)), and are given a code that determines whether and how much further investigation is needed.

### **The Case:**

On entering her patient's room at change of shift, an RN found Janie's mother frightened, shaking, and crying. The mother said, "*I dropped her. I dozed off and I dropped her.*" She fell asleep with the baby in her arms in the bed; then woke up to Janie's cries, and saw her on her back on the floor. The RN noticed that both top bed rails were up, pillows were on the bed, one of the grandparents was awake by the bedside, the alarm on the mother's oxygen saturation monitor was ringing, and equipment to improve blood circulation was no longer connected to her legs. She then did a quick physical assessment and found that the baby was fine, moving all extremities. She called the Neonatal Intensive Care Unit (NICU) and paged the pediatrician. The Neonatal Nurse Practitioner took Janie to the NICU, did a newborn exam on infant, which was normal, and then returned Janie to her mother. The pediatrician arrived, re-examined the baby and ordered a [CT scan](#) of her head to rule out any possible injury. The CT scan was fine and the pediatrician said that Janie could be released home.

In reconstructing how the incident happened the nursing staff found that Janie's mother had awakened to breast feed Janie in bed with her mother in the chair next to bed. Betsy fell asleep and woke up to infant on the floor and her mother just coming out of the lavatory. Betsy became frantic, undoing the oxygen monitor and circulation equipment in trying to get to her daughter, and Janie's grandmother picked her up from the floor. Betsy had been intermittently falling asleep the previous day and through night shift. She was on IV PCA<sup>5</sup> and medication was a major component of her drowsiness. RNs on both shifts checked in with both patients (mother and infant) frequently. The mother was never left in the room without another family member present throughout the shifts. Betsy's mother and mother-in-law had been staying and one or the other was continually present, actively participating in infant/mother care. The nursing staff had oriented Betsy and John when she first arrived to the postpartum room not to sleep with infant in arms but to have someone place Janie on her back in the crib.

### **Take Home Learnings**

1. Regular and routine analysis of adverse event data to identify important, but otherwise hidden, risks is an essential part of ensuring patient safety.

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<sup>5</sup> Patient controlled analgesia (PCA) refers to a strategy that allows patients to control and activate delivery of analgesic medications. This technique uses a sophisticated, computer-controlled pump to deliver appropriate amounts of medication in response to a patient's needs. PCA can be used with either epidural analgesia or with (IV) intravenous medications.

2. These events may be underreported by parents because of their feelings of being at fault. Events may have significant negative impact on family relationships, especially if there is a sense of blame among family members.
3. Mothers and family members, as well as hospital staff need to realize the potential risk of the baby falling out of the bed, and other physical obstacles that may contribute to falls while holding the baby.
4. While informing parents of risks of dropping is important, continual monitoring and reinforcement is necessary.
5. Use of sleeping and pain medications and lack of sleep all contribute to drowsiness that increases the risk for infants falling from a parent's or family member's arms.

### **Possible Actions**

1. Add risk for drop/fall to maternal assessment, including medications affecting sleepiness and re-evaluate with any change in clinical status.
2. Remove sedatives/hypnotics from pre-printed order sets.
3. Evaluate maternal pain medications for adequate pain control and minimal drowsiness.
4. Increase supervision as necessary if newborn is placed in the maternal bed while mother is medicated – consider rounding at specified intervals.
5. Place bassinets next to the side of Mom's bed to maintain closeness without drop/fall risk.
6. Evaluate maternal bed for possible design modifications.
7. Incorporate Safe-by-Design principles<sup>6</sup> into future remodeling/building plans.
8. Include education in prenatal classes to mother/family/other caregivers regarding sleepiness and importance of in-room "respite" by awake and alert adult. Reinforce this information during their hospital stay.

The Oregon Patient Safety Commission commends Providence Women & Children's Program of Oregon for its work and commitment to patient safety and transparency in bringing this issue forward.

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<sup>6</sup> Reiling, John PhD (2008) "Safe By Design," *Prescriptions for Excellence in Health Care*: Vol. 1: 2, Article 4. Available at: <http://jdc.jefferson.edu/pehc/vol1/iss2/4>