What's New in the Patient Safety World

March 2019

Newborn Falls

In our July 28, 2015 Patient Safety Tip of the Week "Not All Falls Are the Same" we briefly discussed newborn falls (see below). But a new study has rekindled interest in this topic. Driscoll et al. (Driscoll 2019) reported a cluster of in-hospital neonatal falls associated with a hospital program to improve breastfeeding, which included rooming-in practices. Three fall events occurred within 1 year of commencing improvement efforts as process and outcome metrics associated with breastfeeding improved. All events were associated with mothers falling asleep while feeding their infant, and all occurred between midnight and 6 am. In two of the three cases the mother fell asleep while breastfeeding. In the third, the newborn had just switched from breastfeeding to bottle feeding and the mother fell asleep while burping the baby after feeding. Two of the 3 falls resulted in injuries to the newborns.

Falls occurred from 38.0 to 75.7 hours after birth. No sedating pain medications were administered within 4 hours of any event. In 2 of 3 cases, mothers experienced notable ongoing social stressors. But in all 3 cases maternal fatigue was the most important contributing factor.

Rooming-in was the most significant change involved in health care delivery during the programmatic effort to improve breastfeeding. The authors recommend that monitoring for in-hospital neonatal falls may be needed during projects aimed at improving breastfeeding, particularly if rooming-in practices are involved.

In our July 28, 2015 Patient Safety Tip of the Week "Not All Falls Are the Same" we discussed newborn falls as distinct from most other falls. We had noted that falls on pediatric units are particularly problematic when it comes to categorizing them. Toddlers may have "developmental" falls as they are learning to walk. Older children may have "intentional" falls as they play. One particular type of event that may be labeled a fall is the "**baby drop**". This is where a baby is dropped while being carried, held, or transferred from person to person. But distinct from other falls are those on neonatal units, such as an infant rolling off a bed or other piece of furniture. In some fall categorizations all these events would be lumped as "falls".

In the column we highlighted a Pennsylvania Patient Safety Authority review that found a surprising number of newborn injuries related to falls (PPSA 2014). There were 272 newborn falls reported over roughly a 10-year period and PPSA even suspected this might be an underestimate because parents and family sometimes do not report such falls to staff. They actually categorized 6 types of fall in newborns:

- Family member fell asleep in bed or chair (while holding newborn)
- Newborn slipped out of arms while family member was lying, sitting, or standing
- Newborn rolled out of hospital bed or isolette
- Family member dropped newborn while transferring
- Newborn rolled off family member's lap
- Unknown

While the numbers at any one hospital are likely to be so low that they would not impact a hospitals overall fall per 1000 patient days rate, they could conceivably impact the falls with injury per 1000 patient days rate because of the high likelihood in injury to the newborn in such falls.

The PPSA review really opened our eyes to a unique population at risk for falls. Combine the unfamiliarity of new parents or relatives with infants and the fatigue or exhaustion from sometimes prolonged labor and it is not surprising that such accidents occur. 58% of the falls occurred between midnight and 7 AM (similar to those in the Driscoll study), with a peak between 5 AM and 6 AM.

And parents, family and friends are not the only ones who might drop an infant. In one incident, a tired nurse dropped an infant (Grossman 2015). The family was told that the nurse was feeding the newborn infant and burping him, and she was drowsy and fell asleep and dropped him. Apparently there was a resultant skull fracture and intracranial bleeding.

The PPSA review provides strategies for reducing the risk of newborn falls. These include staff education, parent and family education, discussion with parents at each shift, rooming-in without bed-sharing, review of maternal medications, hourly rounding with nurses intervening when finding a sleepy mother with a newborn in her arms, protocols for transport of newborns, and environmental assessments. Parents in one facility were also encouraged to call staff before and after newborn feeding so bedrails could be raised or lowered as appropriate.

PPSA also noted a number of maternal characteristics from the literature that were associated with newborn falls, including:

- High level of fatigue
- Breastfeeding or breast/bottle feeding
- Cesarean birth
- Second or third postoperative night
- Pain medication in the last two to four hours
- Age 18 to 28 years

- Prior near miss (e.g., nurses found mother either falling asleep or asleep while holding newborn)
- History of narcotic substance use and/or methadone treatment program

The American Academy of Pediatrics notes that rooming-in (i.e., sharing the same room) without bed-sharing (i.e., sharing the same bed) is most likely to prevent suffocation, strangulation, and entrapments that might occur when the newborn is sleeping in an adult bed (AAP 2016). PPSA also notes other safe infant sleeping recommendations include placing the bassinet close to the parent's bed for feeding, comforting, and monitoring of their newborn. Newborns may be brought into the bed for feeding or comforting but should be returned to their own bassinet when the parent is ready to return to sleep.

The PPSA website also has a variety of tools and educational materials pertinent to preventing newborn falls, including an excellent form for post-fall huddles after newborn falls.

If your neonatal unit encourages rooming-in, what are you doing to help avoid incidents like those discussed by Driscoll and colleagues?

Some of our prior columns related to falls:

- April 16, 2007 "Falls With Injury"
- July 17, 2007 "Falls in Patients on Coumadin or Heparin or Other Anticoagulants"
- January 1, 2008 "Fall Prevention"
- October 7, 2008 "Lessons from Falls....from Rehab Medicine"
- November 18, 2008 "Ticket to Ride: Checklist, Form, or Decision Scorecard?"
- August 4, 2009 "Faulty Fall Risk Assessments?"
- September 22, 2009 "Psychotropic Drugs and Falls in the SNF"
- December 22, 2009 "Falls on Toileting Activities"
- January 2010 "Falls in the Radiology Suite"
- June 2010 "Seeing Clearly a Common Sense Intervention"
- May 29, 2012 "Falls, Fractures, and Fatalities"
- June 5, 2012 "Minor Head Trauma in the Anticoagulated Patient".
- January 15, 2013 "Falls on Inpatient Psychiatry"
- March 2013 "Sedative/Hypnotics and Falls"
- December 3, 2013 "Reducing Harm from Falls on Inpatient Psychiatry"
- June 2014 "New Glasses and Fall Risk"
- July 8, 2014 "Update: Minor Head Trauma in the Anticoagulated Patient"
- August 2014 "Cataract Surgery and Falls"
- November 4, 2014 "Progress on Fall Prevention"
- March 2015 "Another Paradox: Falls Due to Walking Aids"
- June 9, 2015 "Add This to Your Fall Risk Assessment"
- July 28, 2015 "Not All Falls Are the Same"

- October 2015 "Patient Perception of Fall Risk"
- October 27, 2015 "Sentinel Event Alert on Falls and View from Across the Pond"
- February 16, 2016 "Fall Prevention Failing?"
- March 14, 2017 "More on Falls on Inpatient Psychiatry"
- July 2017 "Mobility vs. Falls"
- February 2018 "Global Sensory Impairment and Patient Safety"
- February 20, 2018 "Delirium and Falls"

References:

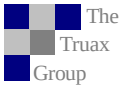
Driscoll CAH, Pereira N, Lichenstein R. In-hospital Neonatal Falls: An Unintended Consequence of Efforts to Improve Breastfeeding. Pediatrics 2019; 143(1): e20182488 http://pediatrics.aappublications.org/content/143/1/e20182488?sso=1&sso_redirect_count=1&nfstatus=401&nftoken=00000000-0000-0000-0000-000000000000&nfstatusdescription=ERROR%3a+No+local+token

Pennsylvania Patient Safety Authority (PPSA). Balancing Family and Newborn Bonding with Patient Safety. Pa Patient Saf Advis 2014; 11(3): 102-108 http://patientsafety.pa.gov/ADVISORIES/Pages/201409_102.aspx

Grossman J. Drowsy Nurse Drops Newborn Baby in Pennsylvania. Huff Post Blog Posted: 07/06/2015 http://www.huffingtonpost.com/van-winkles/drowsy-nurse-drops-newbor_b_7737062.html

Newborn Fall UOR Debrief Form. PPSA 2014 http://patientsafety.pa.gov/pst/Pages/Newborn%20Injuries/form.aspx

AAP (American Academy of Pediatrics). Task Force on Sudden Infant Death Syndrome. Policy Statement. SIDS and Other Sleep-Related Infant Deaths: Updated 2016. Recommendations for a Safe Infant Sleeping Environment Pediatrics 2016; 138(5) February 2016 http://pediatrics.aappublications.org/content/138/5/e20162938



Healthcare Consulting
www.patientsafetysolutions.com

http://www.patientsafetysolutions.com/

Home

Tip of the Week Archive

What's New in the Patient Safety World Archive