Indiana University Health

The Unthinkable:
Using Risk Resilience to Eliminate Newborn Falls

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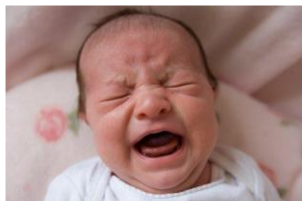
Objectives

- Describe how risk resilience is used to analyze newborn fall events
- Discuss prevention strategies for newborn falls

Disclosure

- I have no conflict of interest



Patient Population and Hospital

- Mother-Baby Unit caring for stable postpartum mothers and healthy newborn infants
- Indiana University Health Methodist Hospital in Indianapolis, Indiana
  - Delivers 3,000 infants annually
  - Urban Level One Trauma Center
  - Culturally diverse patient population
  - Baby-Friendly Hospital Designation

Unit Environment

- 26-bed unit
- Newborn nursery with rooming-in emphasis
- RN staffing ratio
  - 1:3 couplets 16 out of 24 hours per day
  - 1:4 couplets 8 out of 24 hours per day

Event Analyzed based on Outcome

- Incident rate is low due to lack of national reporting
- Oregon Patient Safety Committee demonstrated 1 fall per 2,500 births in a retrospective review
- Intermountain Healthcare System demonstrated 14 falls per 88,000 births
- IU Health Methodist Hospital demonstrated
  - 5 incidents within a 6-month timeframe
  - 5 falls per 1,481 births
  - Average of 62 days between events

Analysis of Event

- Leadership initiated a tactical response to examine the failures in infant falls
- Reviewed variables of the 5 events to identify patterns
  - Age of mom
  - Weight and height of mom
  - Maternal gravida/para
  - Gestation and amount of prenatal care
  - Onset of labor and delivery time
  - Maternal medical history including smoking and/or drug use
  - Recent medication administration including narcotics
  - Breast or bottle fed infant
  - Maternal lab values of hemoglobin and hematocrit
  - Baby weight
  - Date and time of infant fall
  - Birth type
  - Epidural use
  - Maternal home medications

Cross Analysis of Falls

Infant Falls on Mother-Baby

	Mom 1	Mom 2	Mom 3	Mom 4	Mom 5
Age of Mom					
Weight of Mom					
Height of Mom					
Gravida/Para					
Gestation					
Prenatal Care					
Birth Type					
Epidural					
Onset of Labor					
Full Dilation					
Delivery of Infant					
Baby Weight					
Admission & D/C dates					
Fall Date					

Review of the Literature and Summary of Case Findings

Risk Factors from Literature

- 2-3rd post delivery night between 12 am and 9 am
- Cesarean section
- Received opioids
- 18-28 years old
- Breast feeding

Findings based on Risk Factors

- 100%
- 100% SVD
- 40% received opiods
- Average age 23 (min 15; max 27
- 80% breast fed

Hidden Assumptions

- Co-bedding
- Baby-Friendly status not a factor
- Maternal fatigue a huge indication in the pattern of infant falls
  - Did not assume patient was able to realize or recognize their own fatigue
- *Average BMI 35 (morbid obesity >30). Min 32 and max 43*

Pre-designed Defenses

- Patient education "sleep safety"
- Bedside signage communicating the risks of falling asleep while holding a newborn

Strong or weak defense?

Pre-designed Defense

- Mother's nap time
  - Afternoon and/or night nap time
  - Verbal contract with patient for time to sleep with no interruptions
  - Privacy sign placed on door to patient room
  - Baby rooms-in with mother during nap time

Strengthening the Defense

- Students and RNs taught to recognize signs of fatigue and partner with mother to safely place the baby in crib
- Nap time initiated around the mother's need for sleep, not set intervals
- Shift safety huddles to identify mothers who might be at risk. Team heightened awareness of patients at risk.

Pre-designed Defense

- Hired 5 student nurses (11 pm-7 am)
  - Mother's helper
  - Student nurses rounded during the night to identify mothers displaying signs of fatigue
    - Deliberate interventions with mothers when they became fatigued
  - Bed checks for infants
  - Sensitivity to mothers who were morbidly obese

Highly Reliable Processes

- 311 days (as of 11/13/2012) without an infant fall
- Instead of "just an event," it is really about the nursing care we give
- Risk of infant falls now woven into culture of the unit
- Mindset: It is not going to happen again

Thank you!
Questions?

Contact me at khodges3@iuhealth.org or 317.962.5322

References

- Galuska, L. 2011. Prevention of in-hospital newborn falls. AWHONN: 2/3: 59.