

Newborn Drops Prevention: State of the Science



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Introduction

Newborn drops continue to occur in hospitals. A paucity of literature on the subject provides clues to potential solutions, however these studies are not generalizable due to the small number of subjects and ethical constraints that limit prospective studies. A coalition of AWHONN members from facilities across the country joined forces to:

- (1) evaluate the evidence around newborn drops prevention,
- (2) determine the gaps in this science,
- (3) identify a slate of needed research to close these gaps, and
- (4) initiate research designed to close these gaps. The first step in this process was the synthesis of literature.

Results (Cont.):

Reduction strategies included risk assessment, patient/nursing education, visual cues, patient contracts, protected maternal sleep, additional support during nighttime breastfeeding, post-event debriefs and policy development. Reported outcomes include a range of 1-2 years without falls, a 36% decrease in falls, and a consistent downward trend in falls since implementation.

Discussion/Conclusion

Risk assessments used in these studies were not validated and the debrief reported did not include all common cause contributors used in the risk assessment. Validation of a risk assessment tool is needed to correctly identify those most at risk. This synthesis of literature forms the basis of the coalition's next steps which include development and psychometric testing of a newborn drops risk assessment tool.

Methods:

PRISMA methodology guided the synthesis of literature. Mesh terms included ["Risk Factors" and "Accidental Falls" and "risk factors" and (infant, newborn)]. PubMed and CINHAL database searches returned 44 unduplicated articles. Eighteen articles were excluded due to wrong population or setting. Eighteen of 26 articles met inclusion criteria (US hospital or birthing center, inpatient newborn faller). Data extracted included problem/purpose, study design, sample size, methods, instruments with reliability and validity, findings, and implications.

Results:

Articles meeting inclusion criteria (n=18) included 4 observational, 4 retrospective review, 3 descriptive, 3 performance improvement projects, 4 editorial/expert opinion, and 1 practice brief. Study sample sizes ranged from 5-64 newborn falls and in total, the entire body of literature is based on 168 newborn falls.

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2. Miner, J. (2019). Implementation of a Comprehensive Safety Bundle to Support Newborn Fall/Drop Event Prevention and Response. *Nursing for Women's Health*, 23(4), 327-339. doi:10.1016/j.nwh.2019.06.002
3. Karlsson, K., Makatura, J., Mulkey, D. (2021). Implementing a Maternal Rest Bundle to Prevent Newborn Falls. *Journal of Obstetrics, Gynecology, & Neonatal Nursing*, 50(5), 621-631. doi:10.1016/j.jogn.2021.06.005
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7. James, M., Victor, M., Saghir, S., Gentle, P. (2018). Characterization of fall patients: Does age matter? *Journal of Safety Research*, 64:83-92. doi:10.1016/j.jsr.2017.12.010
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