

LOYOLA PERINATAL NETWORK NURSING e-JOURNAL CLUB

Neonatal Evidence-Based (EBP) Practice Research Article Critique Summary

July 9, 2025 – Oct 9, 2025: **Opportunity to get two 2.0 CE's if you complete both articles!**

Citations:

1. Ceylan, S. S., & Bolşlk B. (2018). Effects of Swaddled and Sponge Bathing Methods on Signs of Stress and Pain in Premature Newborns: Implications for Evidence-Based Practice. *Worldviews on Evidence-Based Nursing*, 15(4), 296–303. <https://doi.org/10.1111/wvn.12299>
2. Wisniewski, J. A., Phillipi, C. A., Goyal, N., Smith, A., Hoyt, A. E. W., King, E., West, D., Golden, W. C., & Kellams, A. (2021). Variation in Newborn Skincare Policies Across United States Maternity Hospitals. *Hospital Pediatrics*, 11(9), 1010–1019. <https://doi.org/10.1542/hpeds.2021-005948>

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What was the clinical problem discussed in the Evidence Based Practice (EBP) article/study?

1. **Swaddled Bathing article:** While the goals of infant bathing are often to prevent infections by washing away fluids, dirt, blood, etc. and to protect skin integrity, infant bathing is not harmless. This is especially true for premature infants. Studies show that infant bathing can cause an increase or decrease in heart and respiratory rates and a temporary decrease in oxygen saturations, particularly in the premature population. Hypothermia and cold stress is also always a concern when bathing any infant. Several methods of infant bathing are practiced in hospital settings, with no one standardized or adopted practice. These practices include sponge bathing, small tub bathing, immersion tub bathing, and swaddled tub bathing. Per the authors, a literature review found no similar study comparing the effects of the swaddled bathing and sponge bath.
2. **Variation in Newborn Skincare Policies article:** We all know of one hospital that does something “this way”, and another hospital that does the same thing “that way” (if you’ve been around, you can probably list half a dozen things easily). Surprisingly, skin care is no different. Even with evidence-based guidelines from the Association of Women’s Health, Obstetric and Neonatal Nurses (AWHONN) and the National Association of Neonatal Nurses (NANN), we all do things differently. Why? The authors identify that “national guidelines” for newborn skincare do not exist or have not been adopted, and that actual hospital practices for newborn skincare have not been described in the literature.

What was the purpose of this EBP article/study?

1. **Swaddled Bathing article:** The purpose of this study was to determine the effects of/differences between swaddled bathing and traditional sponge bathing on premature infants’ vital signs, oxygen saturation levels, crying times, pain and stress levels, and thermoregulation.
2. **Variation in Newborn Skincare Policies article:** In this study, they test the hypothesis that maternity hospitals in America follow different policies and do not have standardized practices when it comes to timing of bathing, procedures and products applied to newborn skin, evidence cited, and education provided for new parents on neonatal skincare.

What were the main findings?

1. Swaddled Bathing article:

Findings showed statistically significant differences between bathing methods on vital signs, oxygen saturation levels and crying times. The sponge bath group showed significantly higher ($p < .05$) levels of stress and pain as compared to infants that were swaddled bathed. In addition, body temperatures after sponge baths were significantly lower than after swaddle bathing, concluding that insufficient thermoregulation increases the likelihood of hypothermia. The authors share that these findings are supported by the literature and that during the sponge bath, there is heat loss due to the evaporation of moisture. In swaddle bathing, the infant is covered with warm water during bathing, thus reducing heat changes and ensuring heat protection. Swaddled bathing provides a calm and stress-free bathing experience for newborns by simulating the familiar and safe uterine environment during immersion. In addition, gravity's pull is reduced when the infant's body is surrounded by water, allowing the infant to regulate motor behavior and experience the movements of fetal life again. Swaddled bathing also encouraged family involvement.

2. Variation in Newborn Skincare Policies article:

109 hospitals across 4 regions of the US completed a survey on skin care practices. Total annual deliveries were almost 280,000 infants. Results reported that newborn skin care practices varied widely regarding timing of first bath, evidence-based practices, cleansing products and procedures, and skincare education for parents. The authors cite evidence-based literature on the timing of baths, particularly delayed bathing. Many hospitals in this study had adopted some type of delayed bathing, but there was no standardized consensus on the timing. The majority of hospitals also practiced sponge bathing, even though immersion or swaddled bathing has shown to decrease hypothermia, regulate vital signs, and decrease pain, stress, and crying. Skin care products, detergents and emollients varied, and only a few of the hospitals follow recommendations to not use liquid soaps in the first few hours/days of life. Parent education on skin care products was lacking and often confusing for parents, and only 26% of the centers provided education about laundering newborn clothing and bedding, with only 1 respondent recommending to use a fragrance-free product.

What interventions were implemented or examined in this EBP article/study?

1. Swaddled Bathing article:

This article recognizes the importance of having standardized practices and protocols to guide bathing techniques in both NICU and well-baby nursery/maternal settings. The neonatal skin care guidelines from the Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN) and the National Association of Neonatal Nurses (NANN) recommends swaddle bathing for preterm and newborn infants once their umbilical lines are discontinued, because swaddle bathing promotes both a feeling of safety and security and a quiet calm newborn state. Routine sponge bathing is not recommended for ill premature infants due to the physiologic and behavioral disruptions during sponge bathing.

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3. Variation in Newborn Skincare Policies article:

The authors concluded that more research is needed to identify the effects of different skincare routines on skin integrity, infection rates, and childhood health outcomes to improve evidence-based care of newborn skin. They recommend that further research is needed to improve and standardize care in US nurseries and mother-baby units.

It's interesting that this article was published in 2021, yet the authors do not cite the AWHONN/NANN evidence-based guidelines that can be used by all! (Please LMK if I missed it somewhere).

Your hospital may already have it, but I'll share with your educators. It's a great resource! 😊

Lisa