

AAP News

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Commentary: Safety issues with skin-to-skin care must be acknowledged

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The recent AAP clinical report *Safe Sleep and Skin-to-Skin Care in the Neonatal Period for Healthy Term Newborns* (<http://bit.ly/2cKSXck>) represents a significant contribution to our understanding of the importance of safe sleep in the early days of life and to practices that contribute to the risk of newborn falls in the hospital. The report reviews the evidence supporting skin-to-skin care (SSC) and rooming-in, while addressing safety issues that need to be considered regarding both practices. The association of these practices with newborn sentinel events has been well-described in Europe and now is being recognized increasingly in the U.S.

Sudden unexplained postnatal collapse (SUPC) is a serious event in otherwise healthy term newborns resulting in death in about half the babies and significant impairment in many survivors (Herlenius E, Kuhn P. *Transl Stroke Res.* 2013;4:236-247). The events often happen during SSC.

The AAP report also sheds light on the serious issue of newborn falls in the hospital related to maternal sleeping during bed-sharing. The common link between SUPC events and newborn hospital falls is their association with mother-baby co-sleeping in the prone position.

The potential relationship of SUPC to compliance with breastfeeding practices related to the Baby Friendly Hospital Initiative (BFHI) recently was discussed in a review of hospital deaths of newborns while bed-sharing using data from the National Association of Medical Examiners (Thach BT. *J Perinatol.* 2013;34:275-279). A 2013 article in *AAP News* expressed similar concerns and suggested a need to integrate safe sleep policies with SSC (<http://www.aappublications.org/content/34/11/22>).

Although the AAP report described the SUPC events as rare, we published population-based data from Massachusetts just prior to the report's release documenting 57 deaths over 10 years attributed to sudden unexplained infant deaths in the first month of life. Twenty of the deaths occurred in the first five days of life (Bass JL, et al. *JAMA Pediatr.* 2016;170:923-924).

As Massachusetts represents 1.8% of U.S. births, one could reasonably project that the likely number of cases nationally would be cause for great concern. To put this in perspective, in response to 90 cases of kernicterus over 17 years (*MMWR Morb Mortal Wkly Rep.* 2001;50:491-494), the Centers for Disease Control and Prevention (CDC) took steps that resulted in kernicterus being considered a "never" event.

In light of these data, application of recommendations in the AAP report requires thoughtful evaluation of the risks and benefits of current breastfeeding practices. SSC generally is considered beneficial for preterm newborns well beyond the initial hours of birth. Safety concerns are mitigated by monitoring available in neonatal intensive care units. For healthy term newborns, efficacy has been demonstrated only immediately after birth and during painful procedures when most hospitals can closely monitor the newborn.

The same cannot be said for SSC beyond the immediate newborn period, as close observation may not be available 24 hours a day on postpartum units, and prone sleeping may continue at home unobserved. This is a particularly important issue for hospitals complying with the BFHI which, as the report notes, encourages SSC throughout the hospital stay while rooming-in.

The potential impact of widespread SSC can be appreciated from the Swedish experience cited in the AAP report (Pejovic NJ, Herlenius E. *Acta Paediatr.* 2013;102:680-688). In response to a cluster of events over a 30-month period in Stockholm, the records of 26 survivors of SUPC were reviewed. Investigators found that

half of the events occurred beyond the first two hours of life, four were treated with rapid hypothermia and two required mechanical ventilation.

The authors state that the SUPC rate in Sweden is 10 times the expected rate of the U.K. or Germany, which they associated with widespread adoption of SSC in their units. Of note, Sweden is the only European country reported to have 100% of hospitals with BFHI designation (<http://bit.ly/2dOG5EF>); rates in the U.K. and Germany are 17% and 4%, respectively.

Given that experience, hospitals will need to decide whether to encourage late SSC. For those that choose to do so, as the AAP report indicates that late SSC has not been specifically studied in full-term infants and no procedure has yet been shown to prevent associated sentinel events, parents must be informed of potential risks and hospitals must be equipped to manage adverse events expeditiously. Even hospitals that do not encourage late SSC must educate and safely support parents who initiate it on their own.

Concerns have been raised that this heightened awareness of safety issues could result in modification of practices that may conflict with BFHI designation guidelines and prove counterproductive to breastfeeding success. Fortunately, this is not a binary choice.

Data from the 2016 CDC Breastfeeding Report Card show that the 12 states with the highest breastfeeding initiation rates (86.6%-94.4%) almost always attained or exceeded all four Healthy People 2020 Objectives targets for breastfeeding duration despite low ranges (2%-38%) of BFHI designation. In contrast, neither of the high range BFHI states (85.8%-98.3%) attained a similar level of performance, mostly falling below targets. Clearly, there is more than one pathway to achieve successful breastfeeding outcomes.

In summary, the Academy again has shown leadership in placing the well-being of children as its top priority. While it is always difficult to change direction, this compelling new information will greatly enhance our ability to support breastfeeding safely.