

A COMPARISON OF TWO METHODS OF TRANSITION FROM INCUBATOR TO OPEN CRIB: AWHONN STANDARD VERSUS NIPPLING COMPETENCY WHO GOES HOME SOONER ?

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Purpose and PICO Question

The purpose of this retrospective study is to compare two current standards of practice used at LPCH to transition infants from incubators into open cribs. In a population of healthy preterm infants, does weaning from incubator to open crib by developmental stages such as nipping as compared to weaning by weight criteria result in shorter length of stay or earlier discharge from the hospital ?

Background and Evidence

The first method is based on a national organization, AWHONN's research utilization protocol. Infants are moved from incubators to open cribs if they are greater than 1500 grams and have gained weight for 5 days prior to the transition. The second method allows infants to transition from incubators to open cribs only after they have achieved the developmental competency of being able to nipple all their feeds. Supporters of the second method advocate that their infants are discharged from the hospital sooner at an earlier gestational age.

There is no research which addresses transitions based on attainment of a developmental competency such as nipping skills. Most weaning research focuses on very low birth weight and less than 32 week gestation infants. There is a paucity of research which addresses the transition skills of late preterm infants, the common residents of Level II nurseries.

Methods

By retrospective chart review; included all infants admitted to two satellite Level II nurseries within the LPCH system from April 1 2008- March 31, 2009 who were cared for in an incubator and were capable of safely nipping. As routine practice, one of the nurseries transitions infants based on the AWHONN standard and the other nursery waits until the infant can successfully nipple most feeds before transitioning to an open crib. This situation posed a naturally occurring experiment as they have similar populations.

The following data were collected and analyzed: percentage of infants cared for in incubators, birthweight, gestational age at birth, gestational age at wean, incubator temperature at wean, gestational age at discharge, discharge weight, calculated length of stay, amount of nipple feeds/total feeds.

Results

There does not appear to be significant differences in the length of stay or gestational age at discharge populations between the two LPCH nurseries. The two methods of transition allowed infants to be discharged at a similar gestational age. Current practice in each nursery was able to be quantified.

Conclusion

Further statistical analysis needs to be conducted to clearly identify significance between any of the variables mentioned. The stakeholders will be updated as to the results of the study. Suggestions to revise LPCH policy and procedure will be made to include both methods as effective in transitions from incubator to open crib.

Selected References

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