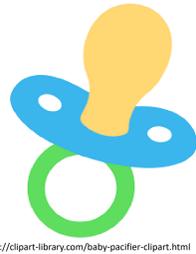


Question:

In infants, how does the use of an artificial nipple, compared to not using an artificial nipple affect breastfeeding patterns?



Background:

- The American Academy of Pediatrics recommends that women breastfeed exclusively for the first 6 months of the baby's life, with the World Health Organization adding that intermittent breastfeeding should continue for at least the first 2 years of the child's life (The Centers for Disease Control and Prevention, 2021).
- Infants who are breastfed have a lower risk of developing asthma, obesity, type I diabetes, ear infections, SIDS (Sudden Infant Death Syndrome), and gastrointestinal infections, while mothers have a lowered risk of developing breast and ovarian cancer, type II diabetes, and high blood pressure (Centers for Disease Control and Prevention, 2021).
- Of infants born in 2018, only 25.8% were breastfed exclusively through six months and 46.3% were exclusively breastfed through three months (Centers for Disease Control and Prevention, 2021).
- There are suspected benefits to initiating pacifier use such as lowering the risk of SIDS or soothing a fussy baby (Mayo Clinic, 2022).
- EBF=Exclusive Breastfeeding.

This work is not an original. This is an evidence-based practice brief that includes published research that was conducted by professionals. Guidance for this project was provided by Stephanie Burkholder and Melissa Kukulski who are professors of NU307: Evidence-Based Practice Research Methods



<https://www.istockphoto.com/illustrations/baby-milk-bottle>

Artificial Nipple Use and Breastfeeding Patterns

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Conclusion:

Three of the articles concluded that the use of artificial nipples had an impact on breastfeeding patterns with Turke et al. (2021), Batista et al. (2017), and Kramer et al. (2001) showing that their use impact the duration of EBF in infancy; however, Jenik et al. showed competing evidence with the study showing that artificial nipples had little to no impact on EBF patterns. Further research is still needed to answer this PICO question in order to depict more current evidence and more extensive studies.

Application:

- Educating patients about current research and helping them make informed decisions regarding artificial nipple use.
- Help patients establish breastfeeding following birth if able and if there is a desire to in collaboration with other members of the healthcare team.
- As nurses we should stay up to date with current research and additional studies to provide the most recent recommendations to our patients.



<https://www.dreamstime.com/illustration/breastfeeding.html>

Study	Description	Results
Pacifier Use, Early Weaning, and Cry/Fuss Behavior by Kramer et al. (2001).	Level II randomized controlled trial. Included 281 mother-infant pairs with the goal of determining whether daily pacifier use possibly influences early weaning of breastfeeding during infancy.	The study found that infants who used a pacifier daily were more likely to stop EBF before the age of 3 months.
Risk Factors for the Lack of Adherence to Breastfeeding by Turke et al. (2021).	Level VI cross-sectional, observational study. The author's goal was to discover risk factors that possibly led to non-adherence to breastfeeding duration recommendations, which included pacifier use.	The authors concluded that infants who used a pacifier were twice as likely to be EBF for less than 6 months and were five times more likely to be breastfed for 2 years when compared to infants who did not use one.
Does the Recommendation to Use a Pacifier Influence the Prevalence of Breastfeeding by Jenik et al. (2009).	Level II randomized controlled study. The researchers utilized a questionnaire to explore the prevalence of EBF at 3 months of age.	The authors found that the recommendation for offering a pacifier did not decrease the prevalence of EBF at 3 months of age.
Association Between Pacifier Use and Bottle-Feeding and Unfavorable Behaviors During Breastfeeding by Batista et al. (2017).	Level VI cross-sectional, observational study. A single trained examiner assessed a breastfeeding session between 427 couplets and a questionnaire was given to determine whether the infant being assessed used a pacifier/bottle.	The study found that infants who had used a bottle/pacifier were more likely to be rated fair or poor on the B-R-E-A-S-T feeding observational form in all five categories than infants who did not.