

The Effects of Cup-Feeding Neonates

Brooklyn D. Washburn, Mariana Garcia, Mya Morales

Heritage University

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Dr. Rika Tanda

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Introduction

The early stages of a newborn's life are crucial for their overall development, and proper feeding practices play a pivotal role in ensuring their well-being. Neonatal cup feeding has emerged as a topic of increasing interest and discussion within the healthcare community, offering an alternative approach to nourishing infants during the crucial initial weeks of life. This method involves the administration of expressed breast milk or formula through a cup rather than a traditional bottle or other feeding devices. As healthcare professionals and researchers strive to optimize neonatal care, understanding the nuances and benefits of cup feeding has become imperative. This paper aims to provide a comprehensive review of the existing literature on neonatal cup feeding, synthesizing evidence from various studies, clinical trials, and expert opinions. The focus will be on elucidating the advantages, challenges, and potential long-term impacts associated with this feeding method. By diving into the knowledge available on neonatal cup feeding, we aim to shed light on its potential to optimize early feeding experiences and contribute to the holistic development of infants.

Objectives

This paper aims to systematically review and evaluate the existing literature and existing studies that have been done on the effectiveness of cup feeding in Neonates. Specifically looking at the effectiveness of weight gain among neonates through the use of cup feeding. The primary objective is to answer the question, does cup feeding, compared to other forms of feeding, have an effect on weight gain and overall outcome, such as hospital stay length, for neonates. The findings aim to contribute valuable insights to neonatal healthcare professionals, by informing and guiding healthcare professionals to optimize feeding strategies for neonatal well-being.

Methods

In this study, a systematic search for articles was conducted using PubMed and Google Scholar databases. The search included a combination of key terms such as, “Finger feeding,” “Cup feeding,” “Premature infants,” “Neonates,” “Breastfeeding success,” and “Weight”. The inclusion criteria focused on primary research articles that were peer-reviewed and published from 2015 to 2023. Inclusion criteria also included studies focusing on cup feeding as a method of nourishment. The exclusion criteria eliminated review articles and editorials. Exclusion criteria also eliminated studies not focused on neonatal feeding. The final selection process considered the purpose of each article to the study’s focus on neonatal cup feeding and the significance and impact of their findings. By taking into account the purpose of each article, the study aimed to build a comprehensive understanding of neonatal cup feeding, encompassing different perspectives and methodological approaches to contribute to the broader discussion on this vital part of neonatal care.

Results

In the comparison of cup, finger, and syringe feeding, no significant differences appeared in reaching full oral feeding time, daily weight gain, or physiological restrictions. Finger-feeding in preterm infants exhibited advantages, including lower milk loss, longer ingestion time, and fewer complications compared to cup feeding. Examining neonatal cup feeding versus finger feeding, both methods led to significant weight gain compared to the control group, with finger feeding showing the highest weight change. A randomized controlled clinical trial found no significant differences in reaching full oral feeding time, but the finger-feeding group showed

favorable outcomes with lower milk loss and reduced complications. In the context of country, belief, preference, and past behavior influencing cup feeding in the neonatal ICU, participants from the United States demonstrated superior knowledge and positive beliefs, with physicians exhibiting more favorable attitudes than nurses. An investigation into palady and cup feeding on premature neonates revealed significant differences, with the palady group exhibiting lower hospitalization, shorter time to full oral feeding, and higher neonatal weight gain post-intervention compared to the cup group.

Discussion

Our PICO question was directed to the effectiveness of weight gain from cup feeding versus other interventions in neonatal infants. We believe that the evidence is questionable whether it is strong enough to support the practice. We believe this is due to the fact that the literature reviewed had varied opinions. There is a need for active and ongoing studies to be done by healthcare professionals, in order to truly determine the effectiveness of cup-feeding neonates and its effect on weight. However, the majority of the articles state a positive correlation amount cup feeding on neonatal weight gain. The quality ratings were somewhat high, reflecting a noteworthy level of reliability and satisfaction across various criteria. The strengths of our project include having a clear research question, adheres to ethical standards, acknowledging and addressing potential limitations, and has practical implications. The limitations of our project include multiple dimensions. This includes biases, swayed results due to favorability, low amount of cooperation, small sample sizes, not consuming the prescribed amount of milk, possible selection bias, and generalizability. Some of these may result in needing to conduct further research due to the degree of limitations. Although the ratings were somewhat high, there is a

continual need for further research to be done, in a more controlled environment to limit these limitations in the future.

Conclusion

In closing, we believe that despite the mixed reviews, there is sufficient evidence that cup feeding can improve neonatal weight gain. An underlying factor that potentially plays a somewhat significant role in whether it is sufficient is due to other health concerns for neonates as well as limitations including biases, and low cooperation from some healthcare professionals in a particular study. We do want to emphasize that this question is still being studied and further research needs to be conducted in order to solidify the true effectiveness of cup feeding and weight gain.

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