

Case Report

Maintenance of Breastfeeding during Hospital Stay: A Case Report

Hastanede Emzirmenin Devamlılığı: Bir Olgu Raporu

Defne Engür¹, Deniz Gönülal¹, Seda Küçükoglu¹, Gizem Demirci¹, Sevim Kaya², Yüksel Demirdağ²

¹University Of Health Sciences Tepecik Training Hospital, Neonatal Intensive Care Unit, İzmir, Türkiye

²University Of Health Sciences Tepecik Training Hospital, Hospital Administration, İzmir, Türkiye

ABSTRACT

This paper describes a case study with efforts of a neonatal intensive care unit (NICU) team to maintain breastfeeding and reduce nipple confusion among hospitalized newborns in a tertiary hospital. A quality improvement strategy has been started to identify the barriers to maintenance of breastfeeding and combat the root-causes of cessation of breastfeeding after hospital discharge. To promote breastfeeding during the hospital stay, parent participation was strongly encouraged, frequency of parental visits, holding by mothers, skin-to-skin care and breastfeeding sessions were increased. Through a proactive lactation care, milk expression was promoted. Furthermore, when the mother was not present, routine feedings were planned to be given by cups instead of baby bottles. Among these measures, the most challenging step was maintenance of cup feeding as an everyday NICU routine. Although the NICU nurses have recognized cup feeding as superior to baby bottles in theory, implementation of a switch in the feeding procedure required considerable effort. To conquer this challenge, practical training sessions for cup feeding were started. Through these practical sessions, nurses gained experience, felt themselves confident in cup feeding and ultimately started to perceive cup feeding as a routine procedure in NICU. The separation of the mother-infant dyad following delivery remains one of the leading causes that interfere with maintenance of breastfeeding. Institutions admitting breastfeeding infants should establish effective policies for adequate lactation support. NICU staff should also find dynamic solutions to overcome the barriers to successful breastfeeding.

Keywords: *Breastfeeding, alternative feeding methods, cup feeding, infant, neonatal intensive care unit*

ÖZET

Bu çalışma, üçüncü basamak bir hastanede, yenidoğan yoğun bakım ünitesi ekibinin hastanede yatan yenidoğanlarda emzirmenin devamlılığının sağlanması için başlattıkları bir kalite iyileştirme çalışmasının sunulduğu bir olgu raporudur. Çalışmada, öncelikle, hastanede yatan bebeklerde, taburculuk sonrası emzirme devamlılığına engel olan kök nedenler incelenmiş ve ardından bu nedenlere yönelik bir kalite iyileştirme stratejisi planlanmıştır. Hastane yatışı sonrasında emzirmenin devamlılığının sağlanması için, yatış sırasında aile ziyaretleri teşvik edilmiş, ziyaret sıklığı artırılmış ve ziyaret sırasında anneler, bebeklerini kucaklarına alma, ten tene temas ve emzirme için cesaretlendirilmiştir. Proaktif yaklaşımla, annelere süt sağma eğitimi verilmiş, annenin katılmadığı beslenme saatlerinde, sağılmış anne sütünün bebeklere verilmesi için biberon yerine kap kullanılması planlanmıştır. Bu önlem basamakları değerlendirildiğinde kapla besleme aşamasında zorluk yaşandığı fark edilmiştir. Yenidoğan yoğun bakım ekibinin, biberon ile karşılaştırıldığında kapla beslemenin avantajları konusunda teorik farkındalık düzeylerinin yüksek olmasına karşın, ilk aşamada bu yeni beslenme yöntemi ile rutin olarak uygulamaya geçilememiştir. Bunun üzerine, ünite, kapla besleme konusunda pratik eğitimler başlatılmış, ekibin bu yöneme alışması sağlanmıştır. Anne bebek çiftinin doğumdan sonra ayrılması, emzirmenin devamlılığının önünde en büyük engellerden biri olarak durmaktadır. Bu ne-

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Correspondence / Yazışma: Defne Engür · SBÜ Tepecik Eğitim ve Araştırma Hastanesi, Yenidoğan Yoğun Bakım Ünitesi, İzmir, Türkiye · defneka@hotmail.com

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denle, emzirilen bebeklerin yatırıldığı hastanelerde, emzirmenin devamlılığını sağlamak için etkin politikaların geliştirilmesi oldukça önemlidir. Yenidoğan yoğun bakım ekibi de süreçteki engellerin aşılması için dinamik stratejiler oluşturmalıdır.

Keywords: *Emzirme, alternatif beslenme yöntemleri, kap ile beslenme, infant, yenidoğan yoğun bakım*

INTRODUCTION

Skin-to-skin contact and breastfeeding initiation within the first hour following delivery are key recommendations to promote breastfeeding (1). Early skin-to-skin contact begins ideally in the delivery room and involves placing the naked baby on the mother's bare chest. This intimate contact at this sensitive period is believed to evoke certain neurobehaviors for programming future physiology (2). Despite the scientific and technological advances in neonatal care, hospitalization of the following newborn delivery remains as one of leading causes that may interfere with mother-child bonding and maintenance of breastfeeding. The Academy of Breastfeeding Medicine recommends that breastfeeding parent and their nursing baby be hospitalized together if either of them requires a hospital stay (3). Unfortunately, this goal cannot be achieved in every setting. Although there is an increased level of awareness and elevated efforts towards the promotion of breastfeeding and skin-to-skin care in neonatal intensive care units (NICU), mothers cannot participate in every single feeding session and baby bottles are generally used for the introduction of expressed milk in hospitalized infants (4). However, bottle feeding is reported to have an association with nipple confusion, and breastfeeding refusal and remains a barrier to maintenance of lactation (5). This paper describes a case study with efforts of a NICU team to maintain breastfeeding and reduce bottle feeding among hospitalized newborns in a tertiary hospital.

Case Report

The setting is the level 2 unit of a tertiary hospital with 6000-7000 births annually. The unit has 13 beds with an isolation room and the staff consists of one neonatologist, five pediatricians and forty-two nurses. The unit generally serves for term and late preterm infants with mild respiratory difficulties and feeding intolerance. Although the NICU team actively supports milk expression and breastfeeding in stable infants, generally, mothers' participation in feeding can be possible only twice or three times a day. The rest of the feedings

were given by the nurses through bottles. After discharge, mothers usually report challenges in maintenance of breastfeeding.

On April 2022, a quality improvement measure was implemented to prevent early cessation of breastfeeding after hospital discharge. To promote breastfeeding during a hospital stay, parent participation was strongly encouraged, frequency of parental visits, holding by mothers, skin-to-skin care and breastfeeding sessions were increased. Breastfeeding mothers were allowed to be together as much as possible with their babies (if there were no medical contraindications). Through proactive lactation care, milk expression was further promoted. In addition, when the mother was not present, routine feedings were planned to be given by cups instead of baby bottles.

Among these measures, the most challenging issue was the maintenance of cup feeding as an everyday NICU routine. Although cup feeding has been recognized by the NICU nurses as superior to baby bottles, in theory, implementation of a switch in the feeding procedure could not be achieved straightforwardly. To overcome this obstacle, educational sessions for cup feeding were started. However, efforts towards the education of the nurse team raised their theoretical knowledge on cup feeding but unfortunately did not result in a behavioral change in their routine preference for bottle feeding. Then, barriers toward cup feeding were explored. At first, lack of time and work overload in the intensive care setting seemed to be as main reasons; however, after detailed analysis, lack of experience rather than theoretical knowledge has been identified as the root cause. Practical training sessions for the NICU team have been implemented for cup feeding through the active involvement of the education nurse and the nurse head (Figure 1). After gaining experience, the nurse team per-contrario approved cup feeding as an easy and time-sparing method when compared with bottle feeding. The parents' of this patient consent was obtained for this study.



Figure 1. Practical education for cup feeding in the neonatal intensive care unit

DISCUSSION

Breastfeeding is the best nutritional choice for infants. However, some mothers may experience troubles during the initiation or maintenance of breastfeeding. For babies that are unable to breastfeed, cup feeding can be an alternative option (4,6). It has been recognized as a neonatal feeding route for long many decades, which is also recommended by WHO and UNICEF. Cup feeding emerges as a strong alternative to nasogastric tubes and bottles, especially in low-resource settings, since cups are easier to keep clean and less likely to facilitate bacterial contamination (7).

In the NICU setting, cup feeding can be supplementary for breastfeeding and lower the use of nasogastric tubes. This option can offer a long-term feeding solution as well, especially for infants with inherent problems that interfere with breastfeeding such as prematurity or oral cavity anomalies (8). Furthermore, a better oral, tactile, and auditory stimulation can be achieved through cup feeding since it provides better exposure to the smell and taste of breast milk (4). Although there are some concerns regarding choking/aspiration risk and its time-consuming nature and the amount of spillage that raises the possibility of insufficient intake, accumulating evidence suggests cup feeding as a safe and efficient method for neonates, even in pre-term infants (4,9). A recent Cochrane review implies that the extent and duration of breastfeeding are significantly increased by implementing cup feeding (10,11). Moreover, bottle feeding has been linked with nipple confusion and early cessation of breastfeeding and remains a barrier toward the maintenance of lactation (5). For these reasons, together with many other ele-

ments for the maintenance of breastfeeding, we aimed to reduce the use of baby bottles in our clinic.

In our case, theoretical sessions on cup feeding raised awareness among the NICU nurses; however, building a permanent routine in the NICU setting required investment of time through hands-on courses. Since lack of experience rather than theoretical knowledge has been identified as the root cause of feeding preferences in NICU, practical workshops rather than theoretical education constituted a key strategy for encouraging the staff towards implementing cup feeding.

In conclusion, unless a private room is available, hospitalization of a newborn means separation of the mother-infant pair, which is associated with problems in initiation/maintenance of lactation and decreases breastfeeding exclusivity. Institutions admitting breastfeeding infants should establish effective policies for adequate lactation support. These policies should include elements that allow the mother to be together as much as possible with the baby. NICU staff should also find dynamic solutions for the situations unique to their clinic to get over the hurdles in the way of breastfeeding.

Conflict of Interest / Çıkar Çatışması

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