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Original Article

Factors associated with breastfeeding initiation time in a baby-friendly hospital in Istanbul

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ABSTRACT

Aim: To investigate perinatal factors that affect breastfeeding of newborns delivered at a baby-friendly public hospital in Turkey, including the time of the first physical examination by a pediatrician, the first union with their mothers, and the first breastfeeding time after delivery.
Method: The research was conducted from May 2nd through June 30th, 2011, in a baby-friendly public hospital in Istanbul. The sample consisted of 194 mothers and their full-term newborns.
The data were collected via an observation form developed by the researchers. In analyzing the data, the average, standard deviation, minimum, maximum values, Chi-square, and percentages were used.
Results: The results revealed that the first physical examinations of the newborns were performed approximately 53.02 ± 39 min (range, 1–180 min) after birth. The newborns were given to their mothers approximately 69.75 ± 41 min (range, 3–190 min) after birth. Consequently, the first initiated breastfeeding took place approximately 78.58 ± 44 min following birth, and active sucking was initiated after approximately 85.90 ± 54 min. A large percentage of the newborns (64.4%) were not examined by a specialist pediatrician within half an hour of birth, and 74.7% were not united with their mothers within the same period. Also, the newborns who initiated breastfeeding within the first half hour had significantly earlier success with active sucking and required significantly less assistance to achieve successful breastfeeding.
Conclusion: The newborns in our study met with their mothers late in the birth ward because examinations of the newborns were delayed. The newborns began initial sucking later, and this chain reaction negatively impacted the breastfeeding success of the newborns.

1. Introduction

It is widely understood that breastfeeding has numerous benefits for the health of the newborn and mother. The World Health Organization (WHO) posits that breastfeeding is the most effective method in protecting and promoting the health of young children (WHO, 1998, 2014; WHO & UNICEF, 2009). The American Academy of Pediatricians (AAP) and the WHO recognize that breast milk is the "optimal form of nutrition for infants," and recommend breastfeeding exclusively for approximately the first six months of life, continuing to a year or beyond with the addition of complementary foods at about six months of age (AAP, 2012; Tana, 2009; WHO, 1998, 2011; WHO & UNICEF, 2009).

The WHO suggests that mothers initiate breastfeeding within one hour of birth (WHO, 2014). Current evidence indicates that "early initiation of breastfeeding" increases the length of exclusive breastfeeding (WHO, 2014). Helping mothers initiate breastfeeding soon after delivery (within half an hour of birth) is one of the ten steps of the UNICEF/WHO Baby-friendly Hospital Initiative to support successful breastfeeding for all women in all settings (Dyson et al., 2006). In 1991, hospitals all around the world that currently implement the "Ten Recommendations for Successful Breastfeeding" were designated as "Baby-friendly Hospitals" (WHO, 2014); Turkey has been part of this program since 1991 (TRMH). There have been many WHO and UNICEF supported efforts to provide education of "Baby-friendly Hospitals" in Turkey. Since the beginning of the programme, the rate of infants who breastfeed exclusively has significantly increased from 21% in 2003 (TDHS, 2003) to 42% in 2008 (TDHS, 2008). However, the rate of exclusive breastfeeding decreased from 42% in the TDHS-2008 report to 30.1% in 2013 for children aged under six months (TDHS, 2013).

Breastfeeding is a common and traditional practice in Turkey. Ninety-six percent of all babies have been breastfeed for a period of time, but for some, the time at which breastfeeding is first initiated is too late (TDHS-2013). Although 56% of births in Turkey take place in baby-friendly hospitals, only 50% of newborns are breastfed within an hour of delivery and 30% are not breastfed within the first 24 h (TDHS-2013). During their first three days of life, 26.5% of infants

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were given other liquids instead of breastmilk (TDHS, 2013). The early introduction of infant formula and other liquids are common in Turkey (TDHS, 2013). Twelve percent of babies received complementary foods before six months in the TDHS-2013 report, compared with 8% in TDHS-2008 (TDHS, 2008, 2013). These results are low compared with the TDHS report in 2008 and indicate a move away from the practice of early breastfeeding in Turkey. Efforts to promote exclusive breastfeeding should continue in the future.

The promotion and support of breastfeeding have global benefits for maternal and infant health, particularly in low- and middle-income countries where their relevance for child survival is undisputed. Turkey is a middle-income country, and breastfeeding rates have decreased in the past five years (TDHS, 2008, 2013). Studies should investigate the reasons for this decline and also provide important contributions to solving this problem. However, when we examined the literature, no study has investigated the effect of traditional postpartum care upon breastfeeding in Turkey.

In developed countries, significant changes have taken place in the last two decades in the approach to postpartum care of newborns. One such development is with kangaroo mother care (KMC), in which the new born is laid on the undressed chest of a mother immediately after birth for the purpose of providing a mother-infant attachment and supporting breast-feeding; KMC has been widely accepted in recent years and has taken its place in routine postpartum care protocols of hospitals (WHO, 2003).

When we compared the postpartum care protocols of developed countries in the approach of traditional postpartum care of newborns with those of our hospital, important differences were observed. This situation is relevant to our hospital and almost all public hospitals in Turkey. Nurses and midwives who work in delivery rooms expect a pediatrician to examine the infants and confirm their health before giving them to their mothers. Pediatricians are frequently absent during deliveries due to reasons such as limited numbers of personnel. Infants are placed under a radiant heater after obtaining their physical measurements and the newborns are given to their mothers after a pediatrician has become available for their examination.

The present research was undertaken at a baby-friendly public hospital in Istanbul and with the purpose of discovering and defining the relationship between the time when newborns were initially examined by a specialist pediatrician, when they were first together with their mothers after delivery, and their initial breastfeeding time. Additional factors that might negatively impact this process were also investigated.

We believe that the study results will contribute towards the rearrangement of postpartum care protocols in such a way that will support breastfeeding and the mother-infant unity, and provide motivation for adopting a new and modern approach to postpartum care throughout the country.

2. Methods

2.1. Description of the sample

The population of the study consisted of mothers who gave vaginal birth at a baby-friendly hospital in Istanbul from May 2nd through June 30th, 2011, as well as their infants. Two hundred seventy-five mothers who met the study criteria were asked to participate in the study and 194 mothers accepted. Thus, the research sample comprised 194 healthy mothers and their infants who were delivered at full-term.

2.2. Data collection

In the study, a breastfeeding scale or scoring system was not used in the evaluation of the breastfeeding skills of the newborns. The researchers developed a literature-based breastfeeding checklist that used “yes” or “no” answers to evaluate the infants’ breastfeeding skills (Ball, Bindler, & Cowen, 2006; Pilitteri, 2007; Wheeler, 2013). The newborns’ breastfeeding was evaluated against five specific sucking parameters in the checklist: 1) baby positioned at the nipple; 2) visible recognition of sucking and swallowing; 3) fullness of cheeks; 4) infant’s lower lip in an outward position; and 5) baby calm and alert at the nipple. Newborns who performed all of the parameters above were considered to have engaged in “active sucking.” In order to provide reliability for the data, the sucking skills of all newborns in the study group were evaluated by the same midwife. The midwife had 3 years experience of working in the postpartum service, experience of breastfeeding consultancy, and participated in the study voluntarily. The midwife had no conflict of interest with the study. Assistance in breastfeeding was defined as milking the breast for infants who failed to suckle and giving milk using a spoon or a cup. The inclusion criteria for the research were vaginal birth, born at 38–42 weeks gestation with birth weight from 2500–4000 g, and for the mother and baby not to have any health problems that could impede sucking (e.g. cleft palate, esophageal atresia).

The Research Questions:

1. When was the newborn examined by a physician?
2. When was the newborn entrusted to the mother?
3. When did the newborn initiate breastfeeding?
4. Does the timing of entrustment of infant to mother impact sucking skills?

The data were collected using the literature-based observation form developed by the researchers. The observation form included 29 questions; 14 open- and 15 closed questions. The weight, length, and Apgar score of the newborn, data such as birth time and physical examination time, initial starting time of sucking, and the initiation time of active sucking were recorded by the same researcher.

2.2.1. Ethical Issues

This study was conducted with the approval of the ethical committee of our hospital. The researcher provided a verbal and written explanation of the study and obtained the written informed consent from the mothers prior to enrolling subjects in the study.

2.3. Data analysis

Data were entered and analyzed using the Statistical Package for the Social Sciences (SPSS, version 15.0). In analyzing the quantitative data, the average, standard deviation, and minimum and maximum values, Chi-square, and percentages were used.

3. Results

When the birth characteristics of the newborns were examined, it was found that their gestation week averages were 38.56 ± 0.76 weeks (range, 38–40 weeks). Other characteristics of the newborns are illustrated in Table 1.

Our results revealed that the first physical examinations of the newborns were performed at approximately 53.02 ± 39 min (range, 1–180 min) after birth. They were entrusted to their mothers within approximately 69.75 ± 41 min (range, 3–190 min) of birth, and breastfeeding was initiated at around 78.58 ± 44 min (range, 10–215 min) after birth. Finally, the infants engaged in active sucking at approximately

Table 1
Birth characteristics of the newborns (N = 194).

Characteristics	Min	Max	Mean ± SD
Gestation week	38	40	38.56 ± 0.76
Weight (gr)	2500	4430	3304.92 ± 351.0
Length (cm)	47	54	50.16 ± 1.29
1st min. Apgar	4	8	7.76 ± 0.64
5th min. Apgar	5	9	8.88 ± 0.45