

REVIEW

The Role of Neonatal Nurses in Initiating the Mother-Infant Relationship in Premature Infants

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Abstract

Mother-infant relationship bears a crucial significance on emotional and physical development of the infant, especially in the development of a feeling of confidence in later years. The relationship is affected negatively by the disappointments about the infant's condition and by its transfer to the intensive care unit for serious health problems. Neonatal nurses occupy a unique position among other health professionals in initiating a positive relationship between the mother and the infant with their professional knowledge, experience and observations.

Keywords: Mother infant relationship, mother, premature infant, neonatal nurses.

Prematüre bebeklerde anne-bebek ilişkisinin başlatılmasında yenidoğan hemşirelerinin rolü

Anne-bebek ilişkisinin erken dönemde başlatılması, bebeğin ruhsal ve fiziksel gelişimi ve çocuğun yaşının ileriki dönemlerinde güven duygusunun kazandırılması için oldukça önemlidir. Prematüre bebeklerde, bebeğin hayal edilenden farklı olması ve bazı sağlık sorunlarının bulunması nedeniyle yoğun bakım ünitesine transfer edilmesi sonucu anne-bebek ilişkisi olumsuz yönde etkilenmektedir. Yenidoğan hemşireleri, yenidoğanlar konusundaki bilgi, gözlem ve deneyimleriyle sağlık ekibi içinde prematüre bebeği olan annelerde, anne-bebek ilişkisinin olumlu yönde başlatılmasında eşsiz bir konuma sahiptirler.

Anahtar Sözcükler: Anne-bebek ilişkisi, anne, prematüre bebek, yenidoğan hemşireleri.

Introduction

Having a baby is one of the momentous events in people's lives, and parents, without exception, dream of having a normal and healthy baby.^{1,3} The mother-infant relationship is based on mothers' first impression of the infant during the first days of neonatal period.^{3,4} Maternal commitment has been regarded as a process of building up an affective connection between the mother and the infant along with a satisfying and emotionally gratifying interaction.³ An infant's commitment and affection to

its mother has proved to be one of the fundamental factors in providing a normal and healthy growth affecting their life quality positively.³

Prematurity, on the other hand, influences maternal commitment adversely.³ It has been often reported that mothers who have their baby prematurely experience high levels of psychosocial stress.^{3,5,6} Mothers may feel a sense of failure or insecurity because of having an unhealthy baby and even reject an interaction with their baby. That mothers of premature

babies fail to maintain their self-confidence and become dissatisfied may cause a delay in commitment and a negative perception on behalf of the infant.^{3,5} Studies have shown that mothers with premature babies see, touch and embrace their babies later than usual and thus have difficulties in being accustomed to having a premature baby, which, eventually, affects mother-infant relationship negatively.^{5,6}

Factors in providing intimacy between the mother and the infant in early neonatal period

These are rooming in, skin to skin care, eye contact, embracing, breastfeeding and participation in baby care.^{2,7}

Rooming-in: Mothers and babies shouldn't be separated after a normal birth. The baby may be placed in a cradle by the mother, which is called "rooming in", and which marks the beginning of mothers' responsibilities. Rooming-in is considered as a significant opportunity for enabling the mother to breast-feed her baby whenever she wants. The baby can be given to the mother unless she is severely ill or addicted to alcohol or drugs.^{2,8}

Interruption of rooming-in in the neonatal period for a variety of reasons and separation of the infant from the mother for a long time also affect the mother-infant relationship.⁸ In a study on the significance of rooming-in period, it was reported that while mothers whose babies were given to them naked after birth were observed to make progress in improving skin to skin care, those whose babies were kept in infant incubators could see their babies 12 days after the birth and failed to improve skin care.⁹

Skin to skin (Kangaroo) care: Also called the Kangaroo care, skin to skin care is an indispensable factor in maternal commitment starting right after the birth when mothers are highly vulnerable to stimuli and developing in the early neonatal period.^{10,11}

Kangaroo care between the premature infant and the parents

- starts with a 30 minutes care once a day,
- can be applied two or three hours a day,

- may also be practical in infants who receive oxygen therapy and nasal CPAP (Continuous Positive Airway Pressure)
- can be integrated into hospital care^{10,11}

These initiatives:

- provide a feeling of fulfillment of pregnancy for the mothers
- helps an earlier transition to natural parental roles
- have an influence on maintaining the heat balance of the premature infant
- reduce apnea and periodic breathing
- palliate the adverse effects of the intensive care on babies
- facilitates early discharge of the newborn infants^{10,11}

Embracing: Skin to skin care phase is followed by embracing when mothers can comfortably hold their babies and want a closer skin contact, which is usually regarded as a sign of love and affection.^{2,12} Most of the mothers hold their babies at breast level on the left hand side so they can hear their mothers' heartbeat and feel secure. It has been also reported that although infants are expected to develop hypothermia when placed naked on their mothers' breast, the body temperature decreases by only about 0.1 centigrade even without a heating lamp.^{1,2}

Eye Contact: Seeing their baby for the first time after birth, mothers try to communicate with their babies in order to encourage them to open their eyes by whispering and talking like "open your eyes", "what color are its eyes?" or "It is looking at me". When the mother manages to make eye contact with her baby, she feels intimate and confident. This, in turn, pleases the baby and starts a substantive relationship between both sides. Eye contact has been also observed between premature infants and their mothers as well and considered to be the beginning of motherhood.^{1,2}

Breastfeeding: Breastfeeding assures a strong mother-infant commitment and reinforces a loving and affectionate relationship. A mother who attentively starts breastfeeding ensures a feeling of confidence for her baby, which brings about a feeling of warmth both

biologically and emotionally. Breastfeeding mothers are believed to be more affectionate and yet less complaining about caring and feeding the baby.^{8,12}

Maternal behaviors that have adverse affects on mother infant relationship

- Dissatisfaction with the birth experience / Ignoring or neglecting the infant
- Perceiving the infant as ugly / Feeling of hate towards the infant
- Annoyance for the voices that the infant produces,
- Feeling of nausea about the baby's vomit / Cleaning up its excretion with anger
- Holding the infant away from her body in an uncomfortable position or refusing to hold the infant
- Avoiding touching, caressing or making eye contact with the infant
- Not talking to the infant or thinking that the infant doesn't love her.
- Insisting that the infant has a health problem although no confirming symptom is found during the tests.
- Claiming that the infant shows no resemblance to parents (one of the most serious negative statements about the infant)
- Considering that the infant doesn't need eye contact, skin to skin contact and positive verbal stimuli.
- Inadequate or excessive feeding, avoiding breastfeeding,
- Leaving the infant alone in the room or in a crowded and noisy place and ignoring the infant.
- Verbal or non-verbal negative behaviors,
- Dissatisfaction with the infant's sex^{2,9}

A healthy infant's emotions may be also influenced adversely in a negative mother-infant relationship.

The problems that may be caused by the negative behaviors of the mothers

- Malnutrition / continuous vomiting / recurrent diarrhea

- Growth Disorder / Constant crying and perturbation
- A lethargic and unhappy outlook / sleeping disorder,
- Staring at a certain point for a long time / a displeasing relationship,
- Minimal verbal production of the infant^{2,9}

The significance of nursing care in initiating the mother/infant relationship in premature infants

A team approach is the most fundamental component of a Neonatal Intensive Care Unit (NICU) where the infant care, treatment and tracking are carried out through a cooperation of a specially trained and experienced health team among whom neonatal care nurses occupy a unique position. They mostly deal with maternal problems such as refraining from touching, caressing or giving care to the infants for the fear of hurting them, or failure in breastfeeding. Spending a great deal of time with the infants when compared to other members of the health team, neonatal care nurses inevitably undertake a more comprehensive responsibility in developing a mother-infant relationship. The most crucial role of the nurse is considered to find out the necessities of the mother about the infant and support them until they can maintain the self-care. In a study conducted with the purpose of assessing the significance of nursing care in initiating the mother-infant relationship, it was observed that there was a statistically meaningful difference between the average monitoring scores of the mothers before and after the education program, which illustrated that education programs for the premature infant care would certainly improve the mother-infant relationship.³

Emphatic Approach: Premature birth or having a baby with certain illnesses or anomalies may cause the family to become emotionally disturbed or develop unexpected reactions. Families of premature infants utilize a variety of coping strategies to overcome such emotional problems. When failed to overcome these problems and maintain a psychological balance, they may even experience emotional breakdowns.^{5,14} Avoiding a crisis and providing a

healthy solution can only be possible so long as the nurse develops an emphatic approach and awareness towards the difficulties of the family allowing and controlling healthy reactions. Nurses, too, may develop feelings of anger, hostility or disappointment if they can't succeed to maintain the psychological balance of the family members, which jeopardizes their assistance to the mothers and the infants.^{5,14,15}

Neonatal nurses should seek the answers for the following questions and design the neonatal care plan for the families of premature infants accordingly.

- How do the family members feel about the premature birth?
- What did it change in relations of the family members?
- How did it affect the emotional conditions of the family members?
- What kind of assistance do the family members need to overcome this problem?^{7,15}

The nurses monitor and evaluate the mother-infant relationship and set a role model for the mother when necessary. It is imperative that the nurses in neonatal units must become accustomed to the infant and therefore examine the infant before showing it to the mother, which helps the nurse to answer the questions better. The nurse should allow the mother to spend some time with her baby and look over it while standing by the mother and answering her questions. During the consultation, the nurse should inform the parents about the birth characteristics, personal and unique characteristics of the infant and explain about the hearing and seeing reflexes. If the infant has an anomaly (like the cleft palate), the mother's attention will be focused on this anomaly unavoidably. However, the nurse's duty is to distract her attention away from the anomaly and focus on the positive characteristics of the infant like "its eyes are beautiful" or "look how it holds my fingers with its tiny hands", which is expected to help the mother to focalize her attention on the positive attitudes of her baby. A warm, kind and relaxing atmosphere will certainly help. At the end of the consultation, the family of the premature baby should be given an instructive guideline.^{3,15,16}

Providing efficient support for the family on their entrance to the intensive care unit: The mother who is going to visit her baby at the intensive care unit is highly anxious to learn if the infant has any anomalies. She looks at the faces of the health team seeking a clue to learn whether or not the baby is making progress and doesn't feel fully satisfied until seeing her baby.^{1,15}

It is crucially important to communicate with the parents right after the birth and choose the words diligently. Pessimistic evaluations and information must not be uttered instantly, which will be kept in mind after all rather than all other evaluations and instructions. The nurse must maintain her sincerity from the beginning and especially refrain from letting out the statistical data about the life chance of the infant.^{1,2} The infant must be shown to the mother when she feels ready. Nevertheless, it should be remembered that a delayed visit will cause more anxiety for the mother. Therefore, mothers of premature infants shouldn't be kept waiting for a long time and the visit must be arranged at a convenient time for both sides.^{4,7} It has been also noted that the mothers should be allowed to see the infant right after the birth to assure the identity of the infant against which no restrictive rules should be enforced in the unit. It must be kept in mind that family visits (parents and siblings) are allowed during the day in neonatal care units worldwide.^{1,2}

Convincing the family about the significance of skin contact: Certain attitude differences were reported among the mothers of premature infants in a study conducted with the mothers of term and preterm infants. It was also observed in the same study that the mothers of premature infants turned around the incubator and touched the limbs of the infants when they were allowed to see their babies for the first time.¹⁷ Although minimum handling policy is a common procedure in neonatal intensive care units in order to prevent infections, neonatal nurses shouldn't hesitate to touch and caress the infant in accordance with the social touching principle. Parents are also allowed, and even encouraged, to see and touch the infant and instructed about infant care in the meantime.

In a study conducted by Yılmaz (2004) on the significance of the effects of baby massage on premature infants, 20 premature infants were given baby massage for 15 minutes three times a day for ten days in total versus the control group of unmassaged 20 premature infants. With the same amount of nutrition and same kind of food, the massaged infants gained 47% more weight; they comparatively stayed awake for a longer period of time, and they were more agile when compared to the control group. It was also reported that the test group illustrated a more rapid and balanced physical and motor and mental development and they were discharged six days earlier.³ Consequently, baby massage obviously helped both physical and mental development in premature infants.

Ensuring parental participation in the infant care: Neonatal unit nurses should assure a close contact between the mother and the infant immediately and sufficiently. The ideal time for the mother's active participation in the infant care should be decided and her relation with the infant should be evaluated. When the infant's health condition becomes stabilized and convenient for the mother care, the nurse should encourage the mother to participate fully in the infant care so as to relieve her anxieties.¹⁸ It was proved in related studies that the mother infant relationship developed better as the mother of the premature baby spent more time in the NICU.^{1,5} The mothers who were accepted to the NICU were observed to develop less negative attitudes towards the infants as they participated more in feeding the baby and changing the diapers and gained much confidence in the premature infant care.^{1,2,5} However, especially primipar mothers may avoid an interaction with the infant and refrain from undertaking the responsibilities of infant care. Therefore it should be kept in mind that these mothers need extra time, attention and support in adjusting themselves to maternal roles.² Neonatal care nurses should highlight the positive developments in the infant's health. If mothers of premature infants, for instance, realize slight weight losses, they should be reminded that gaining weight doesn't always occur gradually upwards and slight losses are considered to be normal, which will certainly mitigate the anxieties of the mothers.¹ The father's par-

ticipation in the infant care will also help to develop empathy between the spouses. The primary responsibility of a neonatal nurse in this phase is to monitor the behaviors of the mother and immediately report if the mother looks dissatisfied with her baby or avoids eye contact or if the father hasn't showed up yet, which necessitates instructive support accordingly.^{2,3} Excessive optimism of the mothers is also regarded harmful as such mothers may not pay much attention to the infant care and neglect instructions occasionally.¹

Assisting to reduce stress: Because the NICU might be considered as unnerving and foreign places, it is highly important to answer all the questions accurately and satisfactorily. Malfunctioning or beeping devices may induce stress for the parents. The intensive care unit nurses should calm down the parents saying that the alarm beeps have nothing to do with their baby and they can see the infant in a few minutes.¹ In a related study, Bell stated that one of the most important problems of the health teams in time of crisis is communication and health professionals who have difficulties in verbal communication may lose connection with the parents of the premature infant.¹⁹ However, a healthy interaction between the nurse and the parents also includes non verbal communication and sometimes saving some time for the mother and her relatives and even a friendly touch would be fairly enough, which will help both sides to overcome the crisis situation.

As a conclusion, initiating a healthy and positive mother/infant relationship between the mother and the premature infant assures a feeling of confidence resulting in a healthy development of personality in later years. The health professionals in the NICU, especially the neonatal care nurses, apparently have great responsibility in accomplishing a healthy relationship between the mother and the premature infant.

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