SUPPORT NETWORK FOR BREASTFEEDING IN LATE PREMATURENESS

Caroline Sissy Tronco*
Ana Lucia de Lourenzi Bonilha**
Jéssica Machado Teles***

RESUMO

Objective: To analyze the support network of mothers of late preterm infants as to breastfeeding. Method: Descriptive-exploratory study with qualitative approach, founded on the Support Network theoretical methodological framework. The informants were 15 mothers, and the interviews were held at the hospital and on the 15th day of life of the child. Data were collected between November 2016 and February 2017. The analysis comprehended support network maps and the type of support the mothers received. Results: The support networks were small and fragile; the support received was centered on house chores and care for the newborn, with breastfeeding support being neglected. Professional support for breastfeeding was identified as fragile. Further considerations: The support network of women need to be included in their assistance and combined with household follow-up, so that they are provided the care they need for breastfeeding promotion.


INTRODUCTION

Late preterm infants are those born between 34 and 36 weeks and six days of gestational age. They are similar to full-term newborns as to weight and size and, most of the time, at birth, do not need to be admitted to the Neonatal Intensive Care Unit(1).

Late preterm infants have their own abilities, according to their fetal development, which directly interferes with their feeding because, to be breastfed, they must have sucking-swallowing-breathing rhythm and coordination(1,2). The low vitality and vigor of late preterm infants, combined with poor sucking-swallowing-breathing coordination, weaker sucking, shorter awake period, and impaired alert behavior compared to term newborns, result in an insufficient stimulation and incomplete emptying of the breasts. These factors determine an insufficient supply of breast milk for late preterm infants, which can determine hypoglycemia, jaundice and low weight gain(2).

In the United States, they account for 7% of all births(2) and approximately 70% of premature births in different locations(3,4). In Porto Alegre, Brazil, the late prematurity rate is 71.3%, considering the births of preterm babies in general(3). Compared to preterm infants of lower gestational age, late preterm infants are at a lower risk of death and complications but, compared to full-term ones, this likelihood changes, and risks increase significantly(2,5).

Mothers of late preterm infants who wish to breastfeed exclusively, that is, having only breast milk as a source of food for their children, may feel unprepared due to the behaviors that these newborns show when breastfed, as a consequence of their immaturity(2).

With the birth of her child, the woman is, in general, more fragile, both physically and emotionally, and becomes vulnerable to the occurrence of emotional crises, needing support to adapt to her new roles, including those of being a mother and a nursing mother. A woman's adaptation to the new role of mother can be affected by her relationship with her partner, with her own mother, with her other children, and by the newborn's condition(6).

Over the period comprehending discharge from the maternity ward to arrival at home, after the baby is born, the mother needs a more effective support from professionals and institutions so that breastfeeding is maintained(2,5).
Mothers are influenced, during the breastfeeding process, by lived, observed or transmitted experiences. Thus, other people can help them in this process and become part of their social network because, for the woman who breastfeeds, said network is one of the factors that most influence her decision to breastfeed\(^6\).

Social network is understood as a set of interpersonal relations that determine a person’s characteristics, such as: habits, customs, beliefs and values, and, from this network, one can receive aid, support or help for their emotional, material, service and information needs. The expression “social network” also refers to a set of situations that evidence affective, friendship, work, economic and social relations\(^7\).

Adequate support for mothers in the first days after delivery significantly changes the quality of care provided by the mother to the newborn. Mothers of preterm babies, when they arrive at home after discharge from the maternity ward, can be affected by sources of stress such as: absence of a health team to support the maintenance of breastfeeding, existence of conflicts with friends and family about how to care for and feeding a child, in addition to discontinuity in healthcare models, situations that can lead mothers to be less confident about their ability to breastfeed\(^2\).

Thus, the question is: Which supports do mothers of late preterm newborns receive to breastfeeding their children? Who supports them? Are there any health professionals and health institutions present in the support? Thus, in this research, the objective was to analyze the support network of mothers of late preterm infants for breastfeeding.

**METHODOLOGY**

It is an exploratory-descriptive qualitative research based on Sanicola's Social Network theoretical methodological framework, which seeks to solve critical everyday events from the involvement and co-responsibility of all people in the primary and secondary social networks\(^7\).

After approval, data collection started at Hospital de Clínicas de Porto Alegre, the birthplace of the late preterm infants included in the research. This university hospital is a reference for high gestational risk and holds the title of Child-Friendly Hospital Initiative since 1997.

Fifteen mothers were selected, with newborns of gestational age between 34 and 36 weeks and 6 days, classified by the Capurro method. This number of interviews was established from Bauer's framework, which defines the limit of fifteen interviews conducted by the researcher\(^8\). Mothers with twin newborns, with congenital malformations, mothers who had any pathology that contraindicated breastfeeding, or whose newborns needed to be admitted to the Neonatal Intensive Care Unit were excluded.

At the first meeting, in the multiple-occupancy room of the hospital, an initial approach was made with the mothers. At this moment, a free and informed consent form was read and signed, some initial questions were asked, and arrangements were made for the second meeting. Around the fifteenth day of the newborn’s life, the second meeting was held, at a place of the mother's choosing.

The interviews happened from November 2016 to February 2017. Out of the 15 participants, 13 chose to have the second meeting at home, and two chose to do it at the Health Unit, which they regarded most appropriate.

During these interviews, a map of the support network was built, from which the support network was identified. During data collection, mothers were asked to: talk about the experience of breastfeeding their child (child’s name), about the people and professionals who were present in their life at the time, about the type of tie they had with those people and professionals, and about the help and support that people were giving them. They were also asked to make a list of people, identifying those from their social network. The mothers helped with a drawing that represented the people mentioned. To clarify possible doubts, a chart with the model of geometric shapes representing the members of their social network was presented. The mothers identified the people who were close or distant and recognized their position in relation to themselves.

After confirming the people who composed their support network, they were asked about the type of tie they had with each of the members in it. To do so, another chart was presented, now
containing a graphic representation of the types of tie, for the mothers to indicate the type of tie and attribute meaning to the chosen type of line.

One week after the interview, each one of the participants was presented with the map of their social network. At this moment, they could remove or add people and change the ties mentioned. None of the mothers requested changes in their support network map after seeing it.

The interviews were conducted exclusively by one of the researchers, being recorded and transcribed. In order to preserve their identity, the letter M was used to refer to the mothers, along with a number following the chronological order in which the meetings took place – for instance, M1, and so on.

In the graphic representation of the ties within the network, the social network map represents the assisted person/family, which takes the center of the drawing, where the relationship of the family with its primary and secondary networks, as well as the third sector and market, is defined. Within the geometric shapes, the names of the members of the network are inserted and, from them, lines are drawn for the map to be understood(7), as shown in the following figure:

In order to analyze the social network, it is necessary to know its structure, function and dynamics, as these characteristics are important and must be observed. For data analysis, the researcher built a geometric representation of the mothers’ support networks. In this representation, the following networks were identified: primary (reciprocity), formal secondary (exchange of rights) and informal secondary(exchange of service and solidarity), third-sector secondary (solidarity and rights), market secondary (exchange of money), mixed secondary (rights and money). In the graphic representation of the types of ties in the social network, they were considered: normal, strong, weak, conflicting, broken, interrupted, discontinuous or ambivalent(7).

To explore the structure of a social network, the following aspects are assessed: a) range, which indicates the number of individuals with whom people keep personal contact – the network is small when it has fewer than nine people, medium when it has between 10 and 30 people, or large, with more than 30 people; b) density, which has to with the interconnection and nodes between the people who are part of the network; c) intensity, which indicates the balance in the relationship between two people; d) closeness, which allows reflecting on emotional distance and reveals degrees of intimacy; e) frequency, which manifests the systematicity with which the tie is established; f) length, which indicates how long the people in the network have known each other; g) roles played by the social network, which can be the most diverse ones; h) degree of symmetry, which allows understanding whether there is reciprocity or one single type of support(7).

The structure of the social network presents important indicators, which allow comprehending how connections are established in the relational context of the people who compose it(7).

The research complied with Resolution 466/12 of the Brazilian National Health Council and was approved with No 57463716.3.0000.5327.

RESULTS AND DISCUSSION

Fifteen mothers of late preterm infants participated in this study. Their age group varied between 23 and 34 years old, with predominance of women aged 23-29 years old. As for education, four had complete elementary school; five, complete high school; five, incomplete high school; and one, complete higher education. Regarding marital status, 11 were married, and four were single.

About obstetric data, nine mothers were
primiparous. Two were referred for high-risk prenatal care, and 13 underwent prenatal care at the health unit. Concerning the newborn, five were born by C-section, and eight were male. When it comes to gestational age at birth, by Capurro, one birth occurred at 34 weeks; six, at 35 weeks; and eight, at 36 weeks of gestation. Birth weight varied between 2110 grams and 3850 grams, and nine babies were born weighing less than 2500 grams, which is considered to be low birth weight.

Analyzing the social network, it was possible to observe that it was small and mostly composed of members of the primary network, with few strong ties between its members. This situation is also found in other studies on social support in childcare, for the most diverse situations in Brazil\textsuperscript{(6,9-11)}.

Family becomes a reference for women, being their source of support, especially female figures, such as mothers, grandmothers, mothers-in-law and sisters. During breastfeeding, support from family members is recognized as essential, as they share knowledge, experiences, habits and behaviors that influence the start and maintenance of breastfeeding\textsuperscript{(6)}.

The members with strong ties, who stood out in the social network of the mothers of late preterm infants, were husbands, fathers, mothers, sisters-in-law and siblings. Nowadays, a family consists of several arrangements. This variety shows the need to change the focus of the nuclear family structure, as a model of family organization, to consider new issues in relation to the coexistence between people in the family, their relationship with the community and with society.

The small size of these mothers' social networks shows the changes in the way of life of families. They tend to be smaller, mostly headed by one of the parents, mainly the mother, with fewer siblings, which leads to ever-smaller primary networks.

Support from partners can have a positive influence on breastfeeding length, with them being able to be the financial provider and helping women with house chores. Their presence can be decisive for the start and maintenance of breastfeeding and is considered an encouragement to exclusive breastfeeding\textsuperscript{(12)}.

Family, culture and/or society interfere with the support received by the mother so that she feels capable of taking care of her child. Thus, all mothers in this study had someone assisting them, whether in domestic activities, or directly helping take care of the child. This division of responsibilities is justified by the maternal burden reflected in the woman's physical and emotional exhaustion\textsuperscript{(13)}.

In the construction of social networks, ties with people such as friends and female neighbors were classified as strong or normal, and help was both direct and indirect, for them to breastfeed their late preterm infant. The social network map showed that direct support to the mothers of late preterm infants for breastfeeding, both from family members and health professionals, was little present.

The support they were provided with was more related to indirect help to breastfeeding. The mothers reported that family members helped with house chores and general care for the newborn, contributing to them dedicating more time to breastfeeding.

Regarding the roles of the social network, the latter played several at the same time, such as companionship, emotional support, advice, and material and services-related aid. Support from family members can be related to the maintenance of daily life, financial management, in domestic activities or in the community.

The secondary network of the mothers of late preterm infants was small or nonexistent and had several broken ties. Among the latter, healthcare professionals stand out, which reflects a fragmented assistance, opposing to what the Healthcare Network proposes. This fact boosts the risk of early weaning\textsuperscript{(10)}.

Other members of the secondary network, identified by two of these mothers, were a healer (M3) and a pastor (M14). Assistance from lay people, such as healers and other religious figures, although they are important social actors, does not seem to have helped the mothers with their nipple fissure issues, since the instructions received were outdated and inadequate.

In this study, the support from community health agents to the mothers was related to problem solving only. This data perhaps indicate the lack of preparation of these professionals to
assist in breastfeeding promotion in late prematurity.

When community health workers are active in the community, women start prenatal care earlier, go to the doctor more often and are better informed about breastfeeding, which raises the chances of them breastfeeding. In a research, the training of health professionals, including community workers, was determinant in increasing exclusive breastfeeding rates in the community, showing that the guidance and encouragement given to women on breastfeeding management are essential in maintaining this practice\(^{(15)}\).

The secondary network appears as support at the moment when difficulties with breastfeeding begin, usually in the immediate return to home, after discharge from the maternity ward. The secondary network in this study, just as in another study\(^{(6)}\), did not stand as a point of support for the breastfeeding women because, in this period, they had the help of members of their primary network mainly.

Social media tools, such as websites, platforms, blogs, microblogs, applications, games, etc., can be used carefully and appropriately to promote health, both at an individual and collective level. These tools can provide knowledge and the sharing of experiences between people\(^{(16)}\).

Some mothers included health professionals in their maps, but the bond established between them was weak or interrupted, so the help provided was small or ineffective. Moreover, the professional support at the hospital does not seem to have been sufficient to meet the breastfeeding needs of the late preterm infants, indicating that health professionals do not identify this condition as one that requires specific care.

Although the mothers recognized some of the characteristics of these children, they were not warned by the professionals about the conditions of not being ready for breastfeeding their children, a fact also found in another research\(^{(9)}\). Among them, sleepiness was interpreted as lack of interest in breast milk, which, coupled with low weight gain, becomes an excuse for the mother to give up on breastfeeding and introduce other foods\(^{(2,5)}\).

The success of these children's eating behavior necessarily depends on the newborn's maturity and brain development\(^{(17)}\). They appear mature and physically stable at birth, but have difficulties with their sucking-swallowing-breathing coordination\(^{(15)}\).

These behaviors in late preterm infants can generate feelings of frustration and disappointment in their mothers while breastfeeding them\(^{(5)}\). Although, in this research, all mothers reported that their late preterm infants were breastfed while at the hospital, only one of the newborns, the son of M6, was being exclusively breastfed at 15 days of life. The children of M2, M3 and M5 were being fed milk formula supplied at discharge from the maternity ward, at 15 days of life.

A research carried out at the same hospital revealed that the supply of milk supplement for full-term newborns still in the maternity ward stood at 23.5%. It is worth noting that newborns who receive milk formula at the hospital are twice as likely to stop breastfeeding in the first month of life\(^{(18)}\).

Some mothers told that their children had trouble breastfeeding at the hospital. And, around three days of age, they were using milk formula to complement breast milk. They also claimed to have received a milk formula prescription at discharge.

The difference between breastfeeding at the hospital and at home was evident in the study. All mothers, except for M6, when they arrived at home, shortly after discharge from the maternity ward, gave their babies other foods besides breast milk. This fact is evidenced in the reports of M1, who, once at home, started using milk formula interspersed with breastfeeding; M3, who, due to breast injuries, started using the bottle; and M5, who was giving her son diluted cow's milk.

Even with the existence of public health policies that encourage breastfeeding, such as Rede Amamenta and Alimenta Brasil, the Baby-friendly Hospital Initiative, the Kangaroo Method, and legal protection of breastfeeding, it was possible to observe difficulties with the implementation and maintenance of breastfeeding in late prematurity, both in the hospital and in the community. Also, actions
resulting from policies and programs were absent or little effective.

A strategy to lessen this problem would be the proposal of adapting the steps of the Baby-friendly Hospital Initiative for late preterm infants\textsuperscript{(19)}. Said initiative includes education for parents about the benefits of breast milk; establishment and maintenance of breast milk production from breastfeeding or expressing every two hours and storage of expressed breast milk; feeding with human milk in the breast or expressed; skin to skin contact; non-nutritive nipple sucking; use of nipple shield, if necessary; assessment of amount of supplied milk by weight gain; adequate follow-up.

There is a recommendation for the development of an individualized care plan to be used both in the hospital and after discharge, for each mother and her late preterm child\textsuperscript{(5)}. Nurses must pass on confidence and encourage mothers, since breastfeeding late preterm infants requires persistence\textsuperscript{(11)}. In the maternity ward, educative actions must be provided gradually to the social support network, in order to enable demystification and include family members in the care after hospital discharge\textsuperscript{(6)}.

Another factor that may have contributed to the failure of exclusive breastfeeding of the late preterm infants was the short hospital stay after delivery. The mothers in this study were discharged with their children between two and three days after delivery. Late preterm infants require more time to learn how to breastfeed due to their physiological immaturity, a fact that determines that health professionals need more time to help mothers establish an adequate milk production, and that exclusive breastfeeding is a priority for hospital discharge.

There is a recommendation for hospital discharge after 48 hours of life only if the babies show the skills required as to feeding and thermoregulation. Follow-up at home by a healthcare professional should be maintained until the end of the first week of life, with the first home visit happening no later than 24 to 48 hours after discharge from the maternity ward\textsuperscript{(2)}.

In this sense, nurses have an important role in health education for mothers of late preterm infants, which is to advise on the start and maintenance of expressing during hospital stay and after discharge\textsuperscript{(19)}. A study identified that, three weeks after delivery, women who expressed milk one hour after birth produced higher volumes of milk than those who started expressing six hours after delivery did\textsuperscript{(20)}.

This study evidenced a mismatch between the hospital and the community networks for the breastfeeding of late preterm infants. This disarticulation between the health services in the care network does not favor breastfeeding, as the mothers of late preterm infants sometimes do not have access to guidance on the specificities of the care that their children need, seeking on their own or with family members solutions that, in most cases, can cause early weaning.

Health professionals must keep following up these mothers for a longer period of time so that they can identify the difficulties the latter have in feeding their children. Planning follow-up after hospital discharge is essential for these newborns. Nurses need to teach parents how to breastfeed their children and how to track their weight gain at home. Close follow-up in primary care, through home visits or phone calls, should occur frequently, start within 48 hours after hospital discharge, and continue until exclusive breastfeeding is effective, with adequate weight gain for the child\textsuperscript{(19)}.

**FURTHER CONSIDERATIONS**

For breastfeeding support to be effective, the members of the mother's social network must be included, which must start soon, in prenatal care, with the identification of the risk of premature birth and guidelines on breastfeeding.

The theme of late prematurity and breastfeeding must be present in the training of health and nursing professionals, in maternity hospitals and basic health units, to enable professionals to identify these newborns and provide care according to their specificities.

In assistance practice, in maternity wards and basic health units, the simple incorporation of the conduct of guiding and expressing milk, as well as of supplying expressed milk, can significantly contribute to the promotion and maintenance of breastfeeding in late prematurity. The hospital discharge of this newborn must be assessed individually, so that it happens only when the mother and her family have been properly instructed about the baby's
physiological specifics and their impact on breastfeeding.

This family needs home follow-up, either through visits right after discharge or by telephone, to learn where they can seek help in case of any difficulties concerning the care of late preterm infants.

The lack of articulation between hospital and community care evidences the need for protocols that monitor these newborns, as the arrival at home is crucial for the establishment of breastfeeding. The possibility of public policies, programs and actions contributing to the breastfeeding of late preterm infants will occur when the latter are identified as subjects of differentiated care.

The limitations of the study, as to its analysis, result from the scarcity of investigations on the theme of late prematurity, especially in Brazil.

REDE DE APOIO PARA O ALEITAMENTO MATERNO NA PREMATURIDADE TARDIA

RESUMO

Objetivo: Analisar a rede de apoio das mães de prematuros tardios para o aleitamento materno. Método: Estudo exploratório-descritivo, com abordagem qualitativa, apoiado no referencial teórico metodológico de Rede de Apoio. As informantes foram 15 mães e as entrevistas, realizadas no hospital e no 15º dia de vida da criança. Os dados foram coletados entre novembro de 2016 e fevereiro de 2017. Analisaram-se os mapas da rede de apoio e o tipo de apoio recebido pelas mães. Resultados: As redes de apoio eram pequenas e frágeis, o apoio recebido centrou-se nos afazeres domésticos e cuidados com o recém-nascido, excetuando-se o apoio ao aleitamento materno. O suporte profissional ao aleitamento materno foi identificado como frágil. Considerações finais: É necessária a inserção da rede de apoio das mulheres no seu atendimento e acompanhamento domiciliar para que estas obtenham o auxílio de que necessitam para a promoção do aleitamento materno.


RED DE APOYO A LA LACTANCIA MATERNAEN LA PREMATURIDAD TARDÍA

RESUMEN

Objetivo: analizar la red de apoyo de las madres de neonatos prematuros tardíos para el amamantamiento materno. Método: estudio exploratorio-descriptivo, con abordaje cualitativo, apoyado en el referencial teórico metodológico de Red de Apoyo. Los sujetos fueron 15 madres y las entrevistas, realizadas en el hospital y el 15º día de vida del niño. Los datos fueron recolectados entre noviembre de 2016 y febrero de 2017. Fueron analizados los mapas de la red de apoyo y el tipo de apoyo recibido por las madres. Resultados: las redes de apoyo eran pequeñas y frágiles, el apoyo recibido se basó en los quehaceres domésticos y cuidados con el recién nacido, exceptuándose el apoyo a la lactancia materna. El soporte profesional al amamantamiento materno fue identificado como frágil. Consideraciones finales: es necesaria la inserción de la red de apoyo a las mujeres en su atención y acompañamiento domiciliario para que estas obtengan la ayuda de que necesitan para la promoción de la lactancia materna.


REFERENCES

12. Meneses M, Morei CLOO, Barros L. As redes sociais dos...


Corresponding author: Caroline Sissy Tronco. Rua São Manoel, 963. Bairro: Rio Branco. CEP: 90620-110. Porto Alegre - Rio Grande do Sul – Brasil. E-mail: bonilha.ana@gmail.com

Submitted: 03/02/2019
Accepted: 14/05/2020