Natural breastfeeding of pre-term newborns from the perspective of the mother: an integrative review

Amamentação natural de recém-nascidos pré-termo sob a ótica materna: uma revisão integrativa

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ABSTRACT

The premature newborn shows immaturities that can cause problems or implications throughout its growth or avoid some organ function or some corporal system. This immaturity often results in inefficient sucking and unsatisfactory oral reflexes, causing delay in the growth and in its developing. The mother who doesn’t nurse commonly lives pain and suffering. A lot of studies have searched the complications found to the starting of natural nursing for premature children, but these studies don’t search the maternal account about these difficulties found. This study aimed to studying the natural nursing process to the preterm infant pointing the maternal account. It sort about a full review in the Portuguese Language using information based in SCIELO, BIREME and LILACS from April to July in 2014 through the key-words ‘difficulty, maternal nursing, premature. It has included some Health magazines and periodic, published in Portuguese between 2004 and 2014, which considerate the Nutrient account concerning the difficulties found. The difficulties found to the starting of the natural nursing to premature newborn babies, according the maternal view can be associated to the breast operation, to the Nurses particular questions and also associated to the new-born babies. We’re not found any account describing the professionals who worked in this process, neither audiologists participation in the motor-oral development in these children. Can be observed in the literature few works and searches contemplating the maternal accounts about the difficulties found to nursing the premature baby. Thus, this work points the necessity of reflection about our professional practices, emphasizing the listening practice and its users.

Keywords: Breast Feeding; Speech, Language and Hearing Sciences; Infant, Premature

RESUMO

O recém-nascido pré-termo apresenta imaturidades que podem acarretar intercorrências ou comprometimentos ao longo de seu desenvolvimento. Estas imaturidades frequentemente resultam em uma sucção inefficiente e reflexos orais insatisfatórios. A mãe que não amamenta comumente vive dor e sofrimento. Inúmeras pesquisas têm buscado apontar as dificuldades encontradas para início da amamentação natural de prematuros, porém esses estudos não buscam o relato materno acerca das dificuldades encontradas. O presente estudo teve como objetivo estudar o processo de amamentação natural em recém-nascido pré-termo ressaltando o discurso materno sobre o tema. Trata-se de uma revisão integrativa de literatura na língua portuguesa, com dados coletados nas bases de dados SCIELO, BIREME e LILACS no período de abril a julho de 2014, por meio das palavras-chave dificuldade, aleitamento materno, amamentação, prematuro, pré-termo. Foram incluídos os periódicos de saúde publicados na língua portuguesa no período de 2004 a 2014, que consideraram o relato da nutriz acerca das dificuldades encontradas. As dificuldades encontradas para início da amamentação natural em prematuros sob a ótica materna podem estar associadas à funcionalidade da mama, às questões particulares das nutriz, ou ainda às inadaptações do recém-nascido. Não foram encontrados relatos que descrevem os profissionais que atuaram nesse processo, tampouco a participação do fonoaudiólogo no desenvolvimento motor-oral dessas crianças. Observa-se na literatura poucos trabalhos que contemplam o relato materno acerca das dificuldades encontradas para amamentar o prematuro. Sendo assim, o estudo aponta a necessidade de reflexão acerca das práticas profissionais, no sentido de valorizar a prática da escuta a essas usuárias.

Descritores: Aleitamento Materno; Fonoaudiologia; Prematuro
INTRODUCTION

The leading cause of child mortality in Brazil is the perinatal conditions, mostly associated with prematurity¹. Study shows prevalence of 11.7% of births of premature babies in relation to all deliveries in the country². In some cases, the premature child has peculiar characteristics that prevent their oral feeding immediately after birth.

Natural breastfeeding is fundamental to protection and development of the newborn. In addition to the nutritional functions, it plays an important role in the strengthening of the relationship between mother and child. Commonly, the mother who does not breastfeed goes through negative experiences and frustrations, believing she had not done her job³.

The speech therapist is the professional inserted in the Neonatal Intensive Care Unit (NICU) able to seek adequacy of oral sensory-motor system, favoring the beginning of natural breastfeeding (NB).

Several studies point out the difficulties in the beginning of breastfeeding in preterm newborns according to the discourse of professionals, assessment of preterm newborn (PN) or even the records⁴-⁶. However, there is dearth of research on the real obstacles faced in the development of these in relation to the establishment of breastfeeding, considering the mother’s speech on the topic. Therefore, this study aimed to identify how is the natural process of breastfeeding of the preterm newborn, looking at the mother’s speech on the subject, and the contributions of the Speech Therapys to reduce these difficulties.

METHODS

In any job, it takes a theoretical study of what you propose to search. In this research it was necessary to identify the difficulties in the beginning of breastfeeding in preterm newborns from the perspective of their mothers and the participation of the speech therapist in the process. To this end, we carried out a literature integrative review using the assumptions proposed by Ganong in 1987⁷ in order to identify the early period of breastfeeding and its difficulties.

The integrative review involves the construction of a comprehensive literature review, contributing to discussions on methods and research results, as well as reflections on the future studies. The initial purpose of this research method is to get a deep understanding of a given phenomenon based on previous studies⁸.

To identify studies on difficulties for natural breastfeeding in preterm newborns, an online search was performed using pre-selected keywords searched in the Virtual Health Library (VHL), in the database of Scientific Electronic Library Online (SCIELO), Regional Library of Medicine (BIREME), Latin American and Caribbean Literature in Health Sciences (LILACS), because they presented the greater coverage of the subject researched in Portuguese, with full information available in the period of 2004 to 2014.

We used the following key words in the search fields: “difficulty”, “breastfeeding”, “nursing”, “premature”, “preterm”. This search occurred in the period from April to July 2014, and found 152,237 articles in the three databases searched.

By consulting the SCIELO, BIREME and LILACS databases we used the following groups of descriptors: “premature lactation”, “premature breastfeeding” “breastfeeding prematurity,” “difficulty preterm breastfeeding”, “difficulty breastfeeding” “difficulty breastfeeding”. After consultation, it was identified a universe with 2,595 articles, distributed in Table 1.

The study included articles published in journals of speech therapy area, as well as in health journals as a whole, but to consider the report of the nursing mother about the difficulties encountered, published in Portuguese, presented in full, accompanied by their summaries published from 2004 to 2014. It is important to note that the studies that were repeated in more than one database were considered only once (Table 2).
After applying the inclusion criteria, 79 articles remained. Of this total, 70 articles were excluded because they did not understand in their resumes indicating that it would be found in the text information required to meet the objectives of this study. Thus, the corpus of this study was composed of nine articles.

According to Souza, Silva and Carvalho, to extract the data of the selected items is necessary to use a previously developed tool to ensure the completeness of the data to be exploited, minimize the risk of errors in transcription, ensure accuracy in the verification of information and serve as a record.

To enhance the data collection we used the book report of articles. For the quantitative analysis, the use of parameters inherent to descriptive statistics was used, such as data collection instrument, which features the articles that comprise the corpus of this study as the author and year of publication, title, design and study variables, results and conclusion.

From the interpretation and synthesis of the results, the data highlighted in the analysis of the articles were compared to theoretical approach. The data are presented in tables and charts, because the use of tables is one of the simplest and understandable forms to represent the characteristics of the primary research.

**LITERATURE REVIEW**

The articles that are part of this research were described as the title, authors, magazine, place and year of publication. Each article also received an identification code for a description of the results. It is observed that only the code of Article 3 was published in a magazine of nutrition. The rest were published in nursing journals, and none in speech therapy magazines, as shown in Figure 1.

Difficulties in breastfeeding initiation of preterm newborns, considering the mother’s speech in the literature can be divided into three groups as seen in Figure 2.

It is observed a similar incidence in the difficulties related to the anatomical characteristics of the nipples and the particular issues of the nursing mothers. Since both are composed of the same number of difficulties cited by mothers.

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**Table 1. Distribution of articles about the groups used for the search in databases**

<table>
<thead>
<tr>
<th>CROSSINGS USED</th>
<th>SCIELO</th>
<th>LILACS</th>
<th>BIREME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lactation premature</td>
<td>14</td>
<td>154</td>
<td>539</td>
</tr>
<tr>
<td>Breastfeeding premature</td>
<td>11</td>
<td>135</td>
<td>1,479</td>
</tr>
<tr>
<td>Breastfeeding prematurity</td>
<td>12</td>
<td>21</td>
<td>37</td>
</tr>
<tr>
<td>Difficulty breastfeeding preterm</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Difficulty lactation</td>
<td>19</td>
<td>66</td>
<td>66</td>
</tr>
<tr>
<td>Difficulty breastfeeding premature</td>
<td>2</td>
<td>8</td>
<td>8</td>
</tr>
</tbody>
</table>

**Table 2. Distribution of selected articles according to inclusion criteria**

<table>
<thead>
<tr>
<th>CROSSINGS USED</th>
<th>SCIELO</th>
<th>LILACS</th>
<th>BIREME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lactation premature</td>
<td>8</td>
<td>9</td>
<td>31</td>
</tr>
<tr>
<td>Breastfeeding premature</td>
<td>2</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>Breastfeeding prematurity</td>
<td>0</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Difficulty breastfeeding preterm</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Difficulty lactation</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Difficulty breastfeeding premature</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>COD</td>
<td>Título</td>
<td>Autor</td>
<td>Revista</td>
</tr>
<tr>
<td>-----</td>
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</tr>
<tr>
<td>1</td>
<td>As representações sociais do aleitamento materno para mães de prematuros em unidade de cuidado canguru.</td>
<td>Javorski, M; Caetano, L.C; Vasconcelos, M.G.L; Leite, A.M; Scochi, C.G.S.</td>
<td>Revista Latino-americana de Enfermagem</td>
</tr>
<tr>
<td>2</td>
<td>Dificuldades maternas no processo de aleitamento materno de prematuros em uma uti neonatal.</td>
<td>Serra, S.O.A; Scochi, C.G.S.</td>
<td>Revista Latino-americana de Enfermagem</td>
</tr>
<tr>
<td>5</td>
<td>A vivência de mães de recém-nascidos prematuros no processo de lactação e amamentação.</td>
<td>Silva, R. V; Silva, I.A.</td>
<td>Revista de Nutrição</td>
</tr>
<tr>
<td>6</td>
<td>Aleitamento materno: a visão das puérperas.</td>
<td>Barreto, C.A; Silva, L.R; Christoffel, M.M.</td>
<td>Revista Eletrônica de Enfermagem</td>
</tr>
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<td>7</td>
<td>Percepção materna do aleitamento no contexto da prematuridade.</td>
<td>Braga, PP; Almeida, C.S; Leopoldino, I.V.</td>
<td>Revista de Enfermagem do Centro-Oeste Mineiro</td>
</tr>
<tr>
<td>8</td>
<td>Dificuldades no aleitamento materno e influência no desmame precoce.</td>
<td>Rocci, E.; Fernandes, R.A. Q.</td>
<td>Revista Brasileira de Enfermagem</td>
</tr>
</tbody>
</table>

**Figura 1.** The periodic identification

**Figura 2.** Difficulties reported by mothers to start breastfeeding
Figure 3 shows the difficulties related to the anatomical characteristics of the nipples with quotes numbers that were found. Lactation maintenance appeared with higher incidence when compared to the others, being mentioned six times. The lack of milk was the second most frequent difficulty mentioned three times. Weak milk, pain for milking, nipple trauma and engorgement were cited twice. Nipple pain and lack of preparation of it, in turn, have been found only once.

Figure 3. Difficulties related to the anatomical characteristics of the nipples

The difficulties related to the particular issues of the nursing mothers insecurity refers to breastfeed as the main impediment, being mentioned twice; while afraid to breastfeed, incorrect positioning of the baby at the breast, breastfeeding management, lack of guidance on feeding practices and provided by a professional, difficulty to meet the schedule of feeding and mother’s health conditions appear only once (Figure 4).

Figure 4. Difficulties related to the particular issues of the nursing mothers
Figure 5 shows that the difficulties associated with newborn adaptations appeared less frequently in the articles that formed the corpus of this study. No suction and hard on the handle are part of this group, mentioned twice. The newborn’s condition and prolonged use of bottles and rubber nipples in turn, appear only once.

The periodic code 1 held a study of premature children mothers in the kangaroo unit, which mention fear and insecurity for breastfeeding, lactation maintenance, breast engorgement and pain in milking as difficulties reported. These results were made possible through a qualitative research in which we used the first stage of enunciation analysis in the light of the Theory of Social Representations, with six mothers of different social extracts, public health service users, who were accompanying the premature child in Kangaroo Care in a Hospital Amigo da Criança from Recife, and they were breastfeeding at least once a day.

The periodic code 2 studied maternal difficulties in the feeding of premature in the neonatal ICU, and demonstrated that prolonged use of bottles and rubber nipples for premature decreases the maintenance of lactation, since after the use of these baby will have more difficult to accept the maternal breast. These results were made possible through a qualitative study, obtaining the data through structured interviews with five mothers of premature babies weighing less than 2000 grams, assisted in the University Hospital in Cuiabá-MT.

The study (Code 3) which researched exclusive breastfeeding in RNPT quotes lactation maintenance (due to prematurity) and no milk as impediments to initiation of breastfeeding. The results were obtained from an exploratory cross-sectional study, based on qualitative methodology. Non-directive and individual interviews were used, with eight premature mothers met in the follow-up clinic at the Maternity School Assis Chateaubriand (CE), service linked to the Unique Health System.

The survey of code 4 found that the main difficulties related to breastfeeding in the neonatal unit was related to complications in milking, lack of milk and difficulty to comply with the time of breastfeeding. The study was conducted through qualitative approach, performed in a neonatal unit located in Rio de Janeiro. The sample consisted of eight mothers of premature children, using a semi-structured interview, with analysis based on Bardin content technique.

The article code 5 mentions the difficulties of maintenance of lactation, handling of feeding and absence of suction. To reach these results, the authors used semi-structured interview which enabled the development of eight speeches of the Collective Subject listed in two blocks with the following themes: “Lactation and breastfeeding” and “Hospital and home context”, fostering the understanding of the experience of the attendees mothers.

The lack of guidance about the practice of breastfeeding and the lack of guidance provided by a professional, difficulty putting the baby to suck, pain and nipple trauma, incorrect positioning of the baby in the breast, lack of nipple preparation, absent of milk and weak milk, insecurity to breastfeed and engorgement are appointed by the Article of code 6. This is a descriptive study that aimed to observe, describe and explore aspects of a situation, not intended to explain or understand the causes underlying the variables under study. Conducted in 2006, 50 mothers in the...
set of maternity hospital accommodation, reference in high-risk pregnancies, which are titled *Iniciativa Hospital Amigo da Criança*, located in the city of Rio de Janeiro.

The article code 7 we sought to unveil the maternal perception of breastfeeding in prematurity, therefore, there was a descriptive qualitative study, carried out in the city of Minas Gerais, using the technique of semi-structured interviews with 12 new mothers of preterm newborn children up to six months of age. According to content analysis proposed by Bardin, the difficulties mentioned were the baby’s condition, milk production and maternal health.

At the periodic 8 we sought to list the difficulties in breastfeeding and the reasons for early weaning, which described the difficulty putting the baby to suck, nipple trauma, little milk and weak milk as difficulties to start breastfeeding in premature children. The survey was conducted through a cohort study with a sample of 225 mothers interviewed in the immediate postpartum period and 15, 30, 60, 120 and 180 days after hospital discharge, by telephone.

Authors’ of the periodic 9 point only decreased milk production as an impediment to the start of breastfeeding in this population. The results were obtained through qualitative approach, exploratory and descriptive, from semi-structured interviews with 11 mothers after hospital discharge.

The periodicics included in the corpus of this study indicate difficulties that can be experienced at this early time, coming against those reported in the literature. Anatomical features, nipple trauma, too full and engorged breasts, maternal fatigue, separation mother/baby, lack of knowledge about breastfeeding and changes in the baby standard of suction are difficulties highlighted by Carvalho et al. observed for seven years, serving as facilitators of breastfeeding.

Marques and Melo performed a cross sectional study, wtg 100 mothers/children, in order to assess breastfeeding, identify and assess the difficulties in the beginning of breastfeeding on rooming in a public hospital in Alagoas. After observation and assessment of breastfeeding, data collection from medical records of children and a questionnaire with mothers, they identified adequacy of suction, incorrect positioning of the mother and baby during breastfeeding, breast anatomy, newborn conditions as agitation, resulting in difficulty sustaining the suck of the areola, mothers without milk ejection signs and lack of guidance about the practice of breastfeeding as embarrassments to start breastfeeding.

Numerous authors point out common breast problems related to the maintenance of lactation as breast engorgement, nipple pain/trauma and infection, block of the lactiferous ducts, insufficient milk production or hypogalactia, as shown in the summary of the difficulties pointed out in the literature performed by Giugliani in 2004.

Breast engorgement, fissures in the nipples, pain and fear of breastfeeding are complications reported by mothers for early breastfeeding, and corroborate the difficulties experienced by members of the nursing staff of a public hospital of Teresina (PI), through interviews with the approach of theoretical content and skills to care and problems related to breastfeeding.

The integrative review performed by Cavalcante et al. in order to know the theoretical production about the difficulties of breastfeeding in preterm found pain for milking, mother-baby separation after the birth seen that many times the child needs special care of the professional health, physiological conditions of the newborn, resulting in problems in lactation and breastfeeding. These data collected support the mother’s speech highlighted the corpus of this study.

Weak milk, how some mothers define colostrum, knowing that this is the first milk produced by the mother, essential for the newborn is appointed by Oliveira, Patel and Fonseca after application of a structured form in order to identify the difficulties encountered by mothers attended in hospital Inácia Pinto dos Santos, in Feira de Santana (BA) for the maintenance of exclusive breastfeeding.

Campana and Castilho bring in their study nipple trauma, maternal insecurity, engorgement, mothers with no desire to breastfeed, breast pain, lack of nipple preparation and weak suction of the newborn as difficulty for breastfeeding RNBP, during their stay in the Hospital of PUC-Campinas (SP).

In the literature there is little evidence of prolonged use of feeding bottles and rubber nipples as an obstacle to the initiation of breastfeeding in preterm children. However, it is known that early use of pacifiers and bottle is related to shorter duration of breastfeeding, as these may cause “nipple confusion,” due to differences between the suction in the breast and artificial nipple.

There were no publications that demonstrate compliance with the feeding schedule as the difficulty to breastfeed, at odds with the account of the nursing mother present in the corpus of this study.

The participation of the speech therapist in motor development - oral and early feeding of these
children was not described in any of the periodics of the corpus of this study. The same happened in the study performed by Leite, Muniz and Andrade due to ignorance that the searched feature about the speech therapy performance in pre, peri and postnatal. However, some of these point to the participation of the team as a whole to overcome obstacles, as described below (Table 3).

Table 3. Distribution of periodic presenting team participation for start of breastfeeding in premature

<table>
<thead>
<tr>
<th>Periodic code</th>
<th>Staff participation in the process</th>
<th>Absence of staff participation in the process</th>
<th>Not described in the study</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,3,4,5,7,8,9</td>
<td></td>
<td>6</td>
<td>2</td>
</tr>
</tbody>
</table>

On the other hand, it was not found in speech therapy periodics concern about the vision of the nursing mother, their longings and desires in the face of difficulties encountered in breastfeeding their children. The absence of this view, the literature specifies the speech, can be a warning for professionals on the need for a more comprehensive look at the breastfeeding process, in which the mother and child should be emphasized. Maternal issues, not only in relation to the anatomical difficulties, but above all with regard to subjective and discursive aspects need to be highlighted to the success of breastfeeding and, consequently, higher gain in the overall development of preterm children.

The description of the team’s participation is almost absolute in periodics that participated in this review. Only the new periodic 6 does not mention participation of staff, and the code 2 does not describe whether there was or not this participation.

The role of professionals in actions and strategies that encourage breastfeeding ensures compliance of the dialogic and participatory model in which professionals and users, each with their role, act as equals.

Breastfeeding is not always easy. Premature breastfeeding is quite challenging because they do not present an adequate suction/swallowing/breathing and some immaturity, nursing mothers come to believe that they are unable to breastfeed them due to their weaknesses. For breastfeeding to take place in a pleasant and effective way, the mother should be well guided by professionals working in the NICU. These should be sensitive to their fears, anxieties and feelings experienced.

For the preparation of the breast, it is transformed during pregnancy. The use of plant bushes is not recommended, because the friction makes him more sensitive and can hurt you. Naturally, the nipples and areolas become darker, increased melanin, which makes them more resistant. And sunbathing is indicated for the strengthening of the skin and thus avoid cracks in the initiation of breastfeeding.

Some progenitors claim to have weak milk, when in fact there is insufficient milk supply and can be justified by problems at the beginning of milk stimulation and implementation of milking. The milking can be carried out in an electric or manual manner. This should be done carefully, because of the sensitivity of the breasts to prevent trauma. For a manual milking the breast should be massaged starting at nearest the areola region, following the farthest region of the breast. With his hand in “C” the woman should place her thumb on the areola, and the index finger down, pressing them toward each other, and slightly inward. The movement should be repeated continuously.

The correct way baby sucks have fundamental importance to avoid trauma to the nipple. For this, the baby must keep his/her body facing the mother (usually in a position called belly to belly), the wide open mouth snapping up much of the areola become more visible at the top than at the bottom, chin leaning on breast and lips facing out. The tongue involves the nipple and the cheeks are round.

Efficient feeding shows some signs that can be observed by the mother how to feel empty breast at the end, the baby releases the breast spontaneously becomes relaxed and may fall asleep, no weight gain and growth, evacuate and presents clear urine. The baby should breastfeed on demand. It is important that mothers’ be directed to alternate the breasts are emptied during breastfeeding. If not emptied, it is
important to return the feed for this mama and so empty it to make sure the baby suckle milk from the beginning and the end of the feeding allowing the baby to receive all the nutrients.

CONCLUSION

The literature is scarce regarding to the publication that considers the mother’s story about the difficulties encountered in breastfeeding of preterm children in their first days of life. This demonstrates the need for further scientific investments that can provide subsidies to change this reality by promoting maternal listening, facilitator and instrumental in establishing breastfeeding, especially for those who were born prematurely and, therefore, were removed from their mothers.

Listening to this user is fundamentally important for physical and mental health of mother and child. Often there are no professionals who provide the care needed for nursing mothers. The speech therapist, not always present and active in this setting, is the professional of communication which can be a facilitator for dialogue between mother and multidisciplinary team.

Therefore, this review clearly demonstrates the need for further scientific investments that bring to the fore the importance of maternal listening, reconstructing identities and meanings to take on the role of women in the act of breastfeeding.

REFERENCES


