



POSTPARTUM WOMEN'S KNOWLEDGE ABOUT BREASTFEEDING AND INTRODUCTION OF OTHER FOODS

Conhecimento de puérperas sobre amamentação e introdução alimentar

Conocimiento de puérperas sobre amamantamiento e introducción alimentaria

Juliana de Brito de Souza Rosa

Lutheran University of Brazil (*Universidade Luterana do Brasil - ULBRA*) - Canoas (RS) - Brazil

Susana Elena Delgado

Lutheran University of Brazil (*Universidade Luterana do Brasil - ULBRA*) - Canoas (RS) - Brazil

ABSTRACT

Objective: To assess mothers' knowledge about breastfeeding and introduction of other foods and identify the difficulties in breastfeeding in the rooming-in ward of a university hospital. **Methods:** Quantitative observational cross-sectional study carried out in 2016 in Canoas, Rio Grande do Sul, with a sample of 40 mother-baby binomials admitted to the rooming-in ward of a university hospital. A protocol adapted from the United Nations Children's Fund was used to assess favorable and unfavorable behaviors during breastfeeding through interviews addressing: sociodemographic information, type of delivery, gestational age, weight of the baby, knowledge about exclusive breastfeeding and its benefits, age at the time of introduction of other foods, and the types of foods introduced. Descriptive statistics was used and associations between variables were assessed. **Results:** The frequency of difficulties in breastfeeding ranged from 5% to 45% according to the aspect assessed. Breast tissue excoriations were associated with baby's difficulty in maintaining the latch, fast sucking with clicking noises and bottom lip turned inwards ($p < 0.05$). With regard to knowledge, 65% ($n=26$) of the participants did not know how they benefited from breastfeeding. Additionally, 88% ($n=35$) reported growth and 75% (30) reported immunity and bonding as the main benefits to the baby. In all, 45% ($n=18$) of the mothers could not define exclusive breastfeeding and 95% ($n=18$) said that complementary feeding should be started after 6 months of life. **Conclusion:** The mothers interviewed have poor knowledge about breastfeeding and do not know the benefits to women's health. However, they reported the benefits to the baby. Unfavorable aspects were evident during breastfeeding.

Descriptors: Rooming-in Care; Breast Feeding; Child Nutrition.

RESUMO

Objetivo: Verificar o conhecimento materno sobre amamentação e introdução alimentar e identificar as dificuldades de aleitamento no alojamento conjunto de um hospital universitário. **Métodos:** Estudo quantitativo, observacional e transversal, realizado em 2016, em Canoas, Rio Grande do Sul, com amostra de 40 binômios mãe-bebê internados em alojamento conjunto de um hospital universitário. Utilizou-se protocolo adaptado do Fundo das Nações Unidas para a Infância para avaliar os comportamentos favoráveis e desfavoráveis durante a amamentação por meio de entrevista contendo: dados sociodemográficos; tipo de parto; idade gestacional e peso do bebê; conhecimento sobre amamentação exclusiva e seus benefícios; idade da introdução alimentar e tipos de alimento. Utilizou-se estatística descritiva e associação entre as variáveis. **Resultados:** A frequência de dificuldades na amamentação variou entre 5% e 45% conforme o aspecto avaliado. As escoriações do tecido mamário associaram-se com bebê que não mantém a pega, sucções rápidas com estalidos e lábio inferior virado para dentro ($p < 0,05$) na amamentação. Sobre o conhecimento, 65% ($n=26$) desconheciam os benefícios da amamentação para a mãe, 88% ($n=35$) citaram o crescimento e 75% (30), a imunidade e o vínculo como benefícios para o filho; 45% ($n=18$) não sabiam definir aleitamento exclusivo e 95% ($n=18$) citaram que a introdução da alimentação complementar deveria ocorrer após os 6 meses. **Conclusão:** As mães investigadas possuem conhecimento limitado sobre amamentação, desconhecem os benefícios para a saúde da mulher, porém citaram benefícios em relação aos filhos. Observaram-se aspectos desfavoráveis no momento da amamentação.

Descritores: Alojamento Conjunto; Aleitamento Materno; Nutrição da Criança.



RESUMEN

Objetivo: Verificar el conocimiento materno sobre el amamantamiento y la introducción alimentaria e identificar las dificultades de la lactancia materna en el alojamiento conjunto de un hospital universitario. **Métodos:** Estudio cuantitativo, observacional y transversal realizado en 2016, en Canoas, Rio Grande de Sul con una muestra de 40 binomios madre-bebé ingresados en el alojamiento conjunto de un hospital universitario. Se utilizó un protocolo adaptado del Fondo de las Naciones Unidas para la Infancia para evaluar las conductas favorables y desfavorables durante el amamantamiento a través de la entrevista con los datos sociodemográficos; el tipo de parto; la edad gestacional y el peso del bebé; el conocimiento del amamantamiento exclusivo y sus beneficios; la edad de la introducción alimentaria y los tipos de alimento. Se utilizó la estadística descriptiva y la asociación entre las variables. **Resultados:** La frecuencia de dificultades para el amamantamiento varió entre el 5% y el 45% según el aspecto evaluado. Las escoriaciones del tejido mamario se asociaron con el bebé que no tiene la pega, las succiones rápidas con los crujidos y el labio inferior girado para dentro ($p < 0,05$) en el amamantamiento. Sobre el conocimiento, el 65% ($n=26$) desconocían los beneficios del amamantamiento para la madre, el 88% ($n=35$) citaron el crecimiento y el 75% (30) la inmunidad y el vínculo como los beneficios para el hijo; el 45% ($n=18$) no sabían definir la lactancia materna exclusiva y el 95% ($n=18$) citaron que la introducción de la alimentación complementaria debería ser después de los 6 meses. **Conclusión:** Las madres investigadas tienen conocimiento limitado sobre el amamantamiento, desconocen los beneficios para la salud de la mujer, sin embargo, han citado los beneficios respecto los hijos. Se observaron aspectos desfavorables durante el amamantamiento.

Descriptor: Alojamiento Conjunto; Lactancia Materna; Nutrición del Niño.

INTRODUCTION

Breastfeeding is a major and important event in the first few months of a baby's life. It allows to meet all the nutritional needs of the newborn in addition to reinforcing the increased production of antibodies, weight gain, better mother-child bond, and the development of oral structures, which are responsible for the proper functioning of breathing, suction, swallowing, chewing and speech⁽¹⁾.

Rooming-in is a hospital system in which the healthy newborn remains with the mother until discharge⁽²⁾. It aims to enhance mother-child integration, contributing to the promotion of breastfeeding, mother-to-baby care guidance and infection prevention⁽³⁾.

The importance of mothers' knowledge about breastfeeding, knowledge that directly interferes with the mother's decision to breastfeed or not and the duration of the breastfeeding, should be highlighted. It is also known that most difficulties presented during the lactation period, when treated early, are easy to solve and result in satisfactory experiences for both mother and baby⁽⁴⁾.

The main difficulties encountered at the beginning of breastfeeding are related to the inadequate position, which makes it difficult for the baby to latch on properly and may cause nipple damage, inefficient breastfeeding and complete emptying of the breasts, which consequently has a negative impact on milk production, thus interfering with the baby's growth⁽⁵⁾.

The Ministry of Health and the World Health Organization recommend exclusive breastfeeding until the sixth month of a baby's life. From this age it should be supplemented up to two years⁽⁶⁾. The correct introduction of foods is as important as breastfeeding, and various pasty and solid foods should be introduced slowly and gradually^(7,8).

Thus, breastfeeding, followed by adequate introduction of foods to the baby, is important for the adequate growth and development of infants, especially in the first two years of life. Thus, mothers' difficulties and knowledge regarding these issues should be investigated to improve the quality of the guidelines on breastfeeding and food introduction, thus improving children's quality of life.

Therefore, the present study aimed to assess mothers' knowledge about breastfeeding and introduction of other foods and identify the difficulties in breastfeeding in the rooming-in ward of a university hospital.

METHODS

This is a quantitative observational cross-sectional study conducted from May to August 2016 in the rooming-in ward of the Mother of God – Ulbra University Hospital (*Hospital Universitário Ulbra - Mãe de Deus*) in Canoas, Rio Grande do Sul, Brazil.

The convenience sample consisted of 40 mother/newborn binomials. Women aged 15-46 hospitalized and breastfeeding during the study period were included. Mothers who did not agree to sign the Free Informed Consent Form were excluded. Mothers under the age of 18 signed a consent form and their parents signed the Free Informed Consent Form.

Interviews were carried out with the mothers to collect sociodemographic data and data on type of delivery, gestational age and baby's weight. Four open-ended questions addressed mothers' knowledge about exclusive breastfeeding, its benefits and the age of introduction of foods as well as which foods should be introduced according to the baby's age.

After that, breastfeeding was observed based on an adapted protocol⁽⁶⁾. Favorable and unfavorable behaviors of the mother and the newborn related to difficulties in the initiation of breastfeeding in the rooming-in ward were observed during breastfeeding. In order to determine breastfeeding performance, the positioning of the mother/baby, the responses of the binomial, the adequacy of the suction, the anatomy of the breasts and the establishment of affective bonds between the mother and the baby were analyzed, classifying it into good, fair or poor according to the scores presented in Chart I. In addition, after the study, the mothers received guidelines and a brochure.

Chart I - Criteria for the classification of the scores in the assessment of breastfeeding by evaluated aspect.

Evaluated aspects	Negative behaviors investigated	Number of negative behaviors observed / Classification of the scores		
		Good	Fair	Poor
Mother/child position	Mother with tense shoulders and leaning on the baby	0-1	2-3	4-5
	Baby's body is distant from the mother			
	Baby is with the neck twisted			
	Baby's chin does not touch the breast			
Double responses	Only shoulders/head are supported	0-1	2-3	4-6
	No response to the breast			
	No search observed			
	Baby is not interested in the breast			
	Baby is restless or crying			
Suction adequacy	Baby does not latch onto the areola	0-1	2-3	4-6
	No sign of milk ejection			
	Mouth almost closed			
	Inwardly turned lower lip			
	Baby's tongue cannot be seen			
Breast anatomy	Tense or evoked cheeks	0	1	2-4
	Rapid sucking with clicking noises			
	Loud noises with no swallowing			
	Engorged and hard breasts			
Affectivity	Flat or inverted nipples	0	1	2-3
	Breast tissue with excoriations			
	Stretched or saggy breasts			
Affectivity	Mother holds the baby nervously	0	1	2-3
	No eye contact between mother and child			
	Mother and baby hardly touch each other			

Source: *Carvalhães et al., 2003⁽⁵⁾*

The data were stored in a database and underwent descriptive statistical analysis to expose the results obtained through the data collection instrument and the chi-squared test was used to check for significant associations between the studied variables. Values were considered significant when "p" was below or equal to 0.05. The variables are presented in tables.

The present research was approved by the Research Ethics Committee of the Lutheran University of Brazil (*Universidade Luterana do Brasil*) in Canoas, Rio Grande do Sul, under Approval No. 1046688.

RESULTS

The study population was composed of 40 postpartum women hospitalized in the maternity ward. The mothers' ages ranged from 15 to 46 years, with a mean age of 26 years. Of all the mothers interviewed, 32.5% (n=13) had complete secondary education, 77.5% (n=31) lived with a partner and 85% (n=34) attended at least 6 prenatal consultations. The mothers who underwent prenatal care indicated that they had not received any information about breastfeeding during consultations. With regard to pregnancy, 40% (n=16) were primiparous and 72.5% (n=29) had normal delivery. Regarding breastfeeding, 55% (n=22) of the mothers had already breastfed before and 35% (n=14) reported not experiencing difficulties in breastfeeding (Table I).

Table I - Characterization of the mother/child binomial in a rooming-in ward of the Mother of God/Ulbra University Hospital (*Hospital Universitário Ulbra/Mãe de Deus*) in Canoas, Rio Grande do Sul, Brazil, 2016.

Variables	n	%
Education		
Incomplete primary education	13	32.5%
Primary education	3	7.5%
Incomplete secondary education	9	22.5%
Secondary education	13	32.5%
Incomplete higher education	2	5.0%
Higher education	0	0.0%
Household income		
None	2	5.0%
One to three minimum wages	33	82.5%
Four to six minimum wages	5	12.5%
More than six minimum wages	0	0.0%
Living with a partner		
Yes	31	77.5%
No	9	22.5%
Type of delivery		
Vaginal	29	72.5%
Cesarean	11	27.5%
Breastfed before the current baby		
Yes	22	55.0%
No	18	45.0%
Difficulty breastfeeding		
Yes	14	35.0%
No	26	65.0%
Prenatal care		
Yes	34	85.0%
No	6	15.0%

The newborns were between 2 and 13 days old and presented 36-42 weeks of gestational age when admitted to the rooming-in ward, with a mean of 39 weeks (standard deviation of 1.3). Only one baby was born preterm (borderline). The mean weight was 3.28 kg, with a standard deviation of 0.44 kg.

According to the scores in the protocol for assessing breastfeeding-related behaviors of the mother/baby binomial, 48% to 75% of the binomials presented scores that indicated satisfactory initiation of breastfeeding depending on the criterion analyzed. However, there were several behaviors that indicated difficulties in all the aspects analyzed (Table II).

Table II - Distribution (%) of mother/newborn binomials according to the scores related to body positioning, binomial's responses, affectivity, breast anatomy and suction in the Mother of God/Ulbra University Hospital (*Hospital Ulbra/Mãe de Deus*) in Canoas, Rio Grande do Sul, Brazil, 2016.

Aspects	Classification of the scores		
	Good	Fair	Poor
Position	70%	25%	5%
Responses	75%	25%	0%
Affective bonds	63%	25%	13%
Breast anatomy	48%	38%	15%
Suction	58%	18%	25%

The aspects with the highest number of behaviors that indicated difficulties at the beginning of breastfeeding were: breast anatomy, suction and establishment of affective bonds (Table III). As for the anatomical aspect of the breasts, 45% (n=18) of the mothers had breast tissue with excoriations, fissures and redness, and 13% (n=5) had flat or inverted nipples.

Table III - Classification of the initial difficulties in breastfeeding in the rooming-in ward of the Mother of God/Ulbra University Hospital (*Hospital Universitário Ulbra/Mãe de Deus*) in Canoas, Rio Grande do Sul, Brazil, 2016.

Aspects	Negative behaviors investigated	n	%
Position	Mother with tense shoulders and leaning on the baby	10	25%
	Baby's body is distant from the mother	12	30%
	Baby is with the neck twisted	11	28%
	Baby's chin does not touch the breast	5	13%
	Only shoulders/head are supported	2	5%
Responses	No response to the breast	1	3%
	No search observed	1	3%
	Baby is not interested in the breast	1	3%
	Baby is restless or crying	10	25%
	Baby does not latch onto the areola	15	38%
	No sign of milk ejection	1	3%
Affective bonds	Mother holds the baby nervously	7	18%
	No eye contact between mother and child	6	15%
	other and baby hardly touch each other	12	30%
Breast Anatomy	Engorged and hard breasts	2	5%
	Flat or inverted nipples	5	13%
	Breast tissue with excoriations	18	45%
	Stretched or saggy breasts	4	10%
Suction	Engorged and hard breasts	11	28%
	Inwardly turned lower lip	16	40%
	Baby's tongue cannot be seen	7	18%
	Tense or evoked cheeks	6	15%
	Rapid sucking with clicking noises	12	30%
	Loud noises with no swallowing	9	23%

* Multiple answers

Regarding the baby's sucking aspects, 40% (n=16) presented inwardly turned lower lip during breastfeeding, 30% (n=12) had rapid sucking with clicking sounds and 28% (n=11) did not open their mouth wide enough to latch on.

Regarding the aspects related to the affective bonds, there were frequent behaviors that indicated difficulty, with 30% (n=12) of the mothers hardly touching the babies, 18% (n=7) holding the baby nervously and 15% (n=6) not keeping eye contact with the baby.

The analysis of the correlations between breast tissue excoriations and the baby not latching on, presenting rapid suction with clicking sounds and/or inwardly turned lower lip showed that the correlations are significant, with $p < 0.05$ (Table IV).

Table IV - Association between breastfeeding difficulties and breast tissue with excoriations in the rooming-in ward in the Mother of God/Ulbra University Hospital (*Hospital Universitário Ulbra/Mãe de Deus*) in Canoas, Rio Grande do Sul, Brazil, 2016.

Variables	Breast tissue with excoriations				p*
	Yes		No		
	n	%	n	%	
Baby latches on the areola					
Yes	6	33%	19	86%	0.002
No	12	67%	3	14%	
Total	18	100%	22	100%	
Rapid sucking with clicking noises					
Yes	9	50%	3	14%	0.032
No	9	50%	19	86%	
Total	18	100%	22	100%	
Inwardly turned lower lip					
Yes	14	78%	2	9%	0.000044
No	4	22%	20	91%	
Total	18	100%	22	100%	

*Chi-squared test

After analyzing the content of the open-ended questions, the following aspects were categorized: when questioned about the benefits of breastfeeding for them, 26 (65%) mothers did not know how to answer. Of those who answered, 12 (30%) mothers reported weight loss as the only benefit. As for the benefits for the baby, 3 aspects were highlighted: 35 (88%) mothers reported growth, 30 (75%) reported immunity and bonding, the latter being reported only by 2 mothers. One mother said there were no benefits for the mother or baby.

With regard to the mothers' knowledge about exclusive breastfeeding and its duration, 18 mothers (45%) were not able to answer and 14 mothers (35%) were aware that there should be no supply of water/teas and/or other foods during exclusive breastfeeding and that it should be continued until the baby is six months old.

Regarding the mothers' knowledge about adequate age for introducing foods, 38 (95%) mothers mentioned that it should be done after six months of the baby's life, but 12 (30%) of them will introduce complementary feeding at 4 months due to their return to work.

With regard to the types of food that should be introduced to the babies, 23 (58%) mothers said that sweet (fruits) and salted (vegetables) baby food should be introduced after the baby is six months old (but three of these mothers said that the baby foods will be liquidized), 33 mothers (82.5%) reported that up to 1 year of age the babies would already be included in the family diet, 2 (5%) mothers reported that they would only introduce supplementary feeding after 1 year of age, 5 mothers (12.5%) would only offer meat and grains after 18 months, and 5 mothers (12.5%) would offer yogurt and commercial baby food before 1 year of age.

DISCUSSION

In recent years, although there has been an increase in breastfeeding rates in Brazil, the World Health Organization has not yet achieved what has been recommended. Some issues, such as biological, cultural, health care and socioeconomic factors, as well as attitudes and practices of health professionals, directly influence the correct maintenance of exclusive breastfeeding⁽⁹⁾.

In the present study, the main difficulties in breastfeeding in the rooming-in ward and the mothers' knowledge about breastfeeding and complementary feeding were observed and analyzed.

The mean age of the mothers in the present study was 26 years, which is similar to that found in another study⁽¹⁰⁾, in which the mean age was 25.7 years. In addition, 77.5% of these women lived with their partners, which was also similar to the finding of another study, in which 72% of the sample were married or lived with a partner, a factor that can be considered important, since the presence of the partner is thought to provide emotional support to women during this period⁽¹¹⁾.

Ordinance No. 1067 of July 4, 2005⁽¹²⁾ ensures the provision of guidelines on and encouragement for breastfeeding to pregnant women and specific guidelines for those who cannot breastfeed during prenatal consultations. However, 85% of the mothers who participated in the present research and received prenatal care did not receive any information during pregnancy, a result different from that found in another study⁽¹³⁾, in which the minority of the interviewees who received prenatal care did not receive any guidelines on breastfeeding during this period.

Guidelines on breastfeeding should be started during prenatal care and should be continued postpartum, especially in the first days of the baby's life, in order to correct misconceptions about breastfeeding⁽¹⁴⁾. A study shows that professionals address breastfeeding issues during some consultations with the women; however, this is not a routine practice in all the consultations nor it is performed by all the professionals⁽¹⁵⁾.

The most frequent difficulties in breastfeeding observed in the present study were related to sucking and were also found in another study⁽¹⁶⁾ in which the behaviors that indicated difficulty were: inwardly turned lower lip, rapid sucking with clicking sounds and almost closed mouth. These factors can lead to ineffective breastfeeding, leaving babies unsatisfied and consequently uncomfortable and/or crying.

The present study also found behaviors that indicated difficulty regarding the positioning of the mother and the baby during breastfeeding, with the most frequent being: baby with the body distant from the mother; mother with tense shoulders and leaning on the baby; and baby with the neck twisted. Such behaviors tend to make it difficult for the baby to latch on properly and may cause nipple damage, which is one of the causes of early weaning⁽⁵⁾.

In the present study, there was a significant correlation between breast tissue with excoriations, fissures and redness and the baby not latching on, rapid sucking with clicking sounds and inwardly turned lower lip. All these aspects refer to the inappropriate latch. Therefore, knowledge about the correct breastfeeding technique is essential, since the adequate positioning of the binomial and the effective latch favor the prevention of pain in breastfeeding and nipple damage, reducing the probability of interrupting breastfeeding due to complications⁽¹⁷⁾.

Regarding the anatomy of the breasts, 52% of the mothers analyzed in the present study obtained scores between fair and poor. This finding corroborates another study⁽¹⁸⁾ in which 56% of the mothers presented scores between fair and poor. In both studies, the main difficulty presented was breast tissue with excoriations, a fact that can be explained by the lack of knowledge about the correct breastfeeding technique.

Regarding the behaviors that indicated affectivity, 38% of the sample of the present research presented negative answers, and another study⁽⁵⁾ presented similar results, in which 34% of the binomials obtained fair and/ or poor scores, which can be explained by the fact in the postpartum period, mothers are more sensitive and susceptible to their ability to breastfeed⁽¹¹⁾.

Exclusive breastfeeding in the first 6 months of the baby's life is of paramount importance as it ensures adequate nutrition, helps in the development of oral structures such as lips, tongue, cheeks, and hard and soft palate, responsible for the proper functioning of breathing, sucking, chewing, swallowing and phonoarticulation, in addition to the development of the nasal breathing pattern⁽¹⁶⁾. However, in the present study, a large proportion of mothers are unaware of the meaning of exclusive breastfeeding. Those who knew how to answer, reported that breast milk should be offered until the sixth month of life, but a portion of these mothers reported feeling the need to offer other liquids, such as water and teas, in order to quench the thirst of babies, a factor that may be associated with beliefs and myths about breastfeeding. Teas and water are contraindicated, as they can lead to satiety, decreasing breast milk intake and causing caloric deficits⁽¹⁹⁾.

When questioned about the benefits of breastfeeding for the baby, most of the mothers interviewed in the present study reported growth, weight gain, and immunity, as found in other studies^(13,20). Even with the lack of information received during prenatal care, it is noted that mothers present knowledge about breastfeeding, which can be explained by the greater level of information provided by social media and by the great emphasis on the benefits of breastfeeding for the baby in national campaigns⁽⁶⁾.

Most of the interviewees in the present study believed that breastfeeding only had benefits for the baby, a finding that is similar to that found in another study⁽²¹⁾. The mothers who reported that breastfeeding provided benefits for the woman, cited postpartum weight loss as the main benefit, which was also found in another study⁽²²⁾. This can be explained by the lack of information during prenatal care and by the fact that women feel they are being charged by society on breastfeeding, believing that this practice should be a maternal obligation and not a conscious and beneficial choice for the mother/baby binomial⁽⁶⁾.

Most of the mothers (95%) interviewed in the present research knew that exclusive breastfeeding should be performed until the sixth month of the baby's life, but a portion of them (30%) reported the need to introduce other foods early because of their return to work. A review study⁽²³⁾ found that the lack of support from labor institutions and the lack of environmental conditions for pumping breastmilk, in addition to the lack of day-care centers near or within the work environment, were the main difficulties pointed out by mothers regarding maintenance of breastfeeding, which may justify the findings of the present study.

From the sixth month of age, adequate complementary feeding should be started as a complement to breastfeeding, with diets varied in consistency, calorie and nutrient. The food practices are influenced by several factors, such as knowledge and experiences built from socio-cultural conditions and the scientific knowledge about each age⁽²⁴⁾.

When questioned about the correct age to start complementary feeding, most of the mothers in the present research reported that the ideal would be to initially introduce fruit and vegetable baby foods after the sixth month of age. Other mothers, however, reported that they would introduce complementary feeding at four months of age. Complementary foods should be offered after six months of age when the child already has physiological maturity to chew, swallow and digest. The early introduction of complementary feeding contributes to the reduction of iron absorption present in breast milk, which can result in anemia in the babies⁽¹⁹⁾.

After 6 months of life the child should receive 3 meals a day with complementary foods and water at meal intervals. These meals should initially be composed of two sweet baby foods and one salted baby food, which may include vegetables, cereals or tubers, animal source foods and beans. At the age of 7 months, one more salted baby food should be included. At the end of 8 months, the child may gradually receive meals prepared for the family with a reduced amount of salt, excluding spicy seasonings and processed foods. These foods can be altered in relation to consistency (crushed, mashed, shredded or cut into small pieces) until the child reaches 1 year of age when they can receive the food in normal consistency⁽⁸⁾.

Another factor that drew attention in the present study is the report of mothers who believe that babies should start receiving complementary foods only when they are one year old, or that only meat should be offered after 18 months, although just a minority of the mothers reported that. This delay in the introduction of complementary foods can lead to growth retardation, risk of malnutrition and deficiency of micronutrients, compromising the adequate development of the baby⁽²⁵⁾.

The intention to introduce industrialized foods, such as yogurts, commercial baby foods and other dairy foods to the baby was also an important finding in the present study. This consumption can be influenced by factors such as household income and maternal age and education. Although there are no specific recommendations regarding the quantity and frequency of consumption of industrialized products, it is known that they should be avoided, especially in the first years of life. This is due to the evidence that continued and excessive intake promotes the early development of noncommunicable diseases⁽²⁶⁾, such as cardiovascular diseases, diabetes, chronic respiratory diseases and cancer⁽²⁷⁾.

A limitation of the present study was the high turnover of mother/baby binomials in the rooming-in ward. Thus, the observation of breastfeeding was performed only once for each mother/baby binomial. Observing more feedings could possibly lead to different scores considering the learning curve.

The difficulties related to breastfeeding presented by the mothers in the present study evidenced the need for trained professionals (speech therapists, nurses, physicians, nutritionists) to perform actions to assist mothers in the beginning of breastfeeding, avoiding the risk of early weaning. In addition, awareness about the introduction of other foods should be raised as mothers present a lack of or limited knowledge about the issue.

CONCLUSION

The mothers analyzed have limited knowledge about breastfeeding and are unaware of the health benefits for the woman; however, they have reported for the baby. In addition, most of the respondents do not know the recommended period for exclusive breastfeeding, although they knew that the introduction of complementary feeding should take place after 6 months of age. The presence of unfavorable aspects at the time of breastfeeding was observed. The presence of breast tissue with excoriations was associated with rapid sucking with clicking noises, inwardly turned lower lip, and the situation in which the baby does not latch onto the areola, indicating an incorrect latch and making breastfeeding difficult.

REFERENCES

1. Medeiros AMC, Batista BG, Barreto IDC. Breastfeeding and speech-language pathology: knowledge and acceptance of nursing mothers of a maternity. *Audiol Commun Rev*. 2015;20(3):183-90.
2. Marques MCF, Melo AM. Amamentação no alojamento conjunto. *Rev Cefac*. 2008;10(2):261-71.
3. Silva MA, Farias MCAD, Sousa AKA, Abreu RMSX. Atuação da enfermagem em alojamento conjunto: percepção de puérperas. *REBES*. 2015;5(2):35-44.
4. Jesus ALBC. Influências dos fatores maternos e práticas de aleitamento materno no ingurgitamento mamário [dissertação]. Coimbra: Escola Superior de Enfermagem; 2013.
5. Carvalhães MABL, Corrêa CRH. Identificação de dificuldades no início do aleitamento materno mediante aplicação de protocolo. *J Pediatr*. 2003;79(1):13-20.
6. Azevedo ARR, Alves VH, Souza RMP, Rodrigues DP, Branco MBLR, Cruz AFN. O manejo clínico da amamentação: saberes dos enfermeiros. *Esc Anna Nery Rev Enferm*. 2015;19(3):439-45.
7. Corrêa EN, Corso ACT, Moreira EAM, Kazapi IA. Alimentação complementar e características maternas de crianças menores de dois anos de idade em Florianópolis (SC). *Rev Paul Pediatr*. 2009;27(3):258-64.
8. Ministério da Saúde (BR). Dez passos para alimentação saudável. 2ª ed. Brasília: Ministério da Saúde; 2013 [accessed on 2017 Apr 4]. Available from: http://www.blog.saude.gov.br/images/arquivos/dez_passos_alimentacao_saudavel_guia.pdf
9. Instituto Brasileiro de Geografia e Estatística. Pesquisa nacional de saúde 2013: ciclos de vida. Brasil e grandes regiões. Rio de Janeiro: IBGE; 2015.
10. Rodrigues AP, Padoin SMM, Guido LA, Lopes LFD. Fatores do pré-natal e puerpério que interferem na autoeficácia em amamentação. *Esc Anna Nery Rev Enferm*. 2014;18(2):251-67.
11. Santana JM, Brito SM, Santos DB. Amamentação: conhecimento e prática de gestantes. *Mundo Saúde*. 2013;37(3):259-67.
12. Brasil. Portaria nº 1.067, de 4 de julho de 2005. Política Nacional de atenção à Saúde Obstétrica e Neonatal. Diário Oficial da República Federativa do Brasil, Brasília, 2005.
13. Escarce AG, Araújo NG, Friche AAL, Motta AR. Influência da orientação sobre aleitamento materno no comportamento das usuárias de um hospital universitário. *Rev Cefac*. 2013;15(6):1570-82.
14. Leite RFB, Muniz MCMC, Andrade ISN. Conhecimento materno sobre Fonoaudiologia e amamentação em alojamento conjunto. *Rev Bras Promoç Saúde*. 2009;22(1):36-40.
15. Martins RMC, Montrone AVG. Implementação da Iniciativa Unidade Básica Amiga da Amamentação: educação continuada e prática profissional. *Rev Eletrônica Enferm*. 2009;11(3):545-53.
16. Demitto MO, Silva TC, Páschoa ARZ, Mathias TAF, Bercini LO. Orientações sobre amamentação na assistência pré-natal: uma revisão integrativa. *Rev Rene*. 2010;11:223-9.
17. Carvalho ACO, Saraiva ARB, Gonçalves GAA, Soares JR, Pinto SL. Aleitamento materno: promovendo o cuidar no alojamento conjunto. *Rev Rene*. 2013;14(2):241-51.

18. Benabou S, Duran ECM, Vale IN. Avaliação da técnica de amamentação em alojamento conjunto de um hospital universitário. *Rev Enferm UFPE*. 2012;6(11):2735-43.
19. Schincaglia RM, Oliveira AC, Sousa LM, Martins KA. Práticas alimentares e fatores associados à introdução precoce da alimentação complementar em crianças menores de 6 meses na região noroeste de Goiânia. *Epidemiol Serv Saúde*. 2015;24(3):465-74.
20. Amaral LJX, Sales SS, Carvalho DPSGP, Cruz GKP, Azevedo IS, Ferreira MA Júnior. Fatores que influenciam na interrupção do aleitamento materno exclusivo em nutrízes. *Rev Gaúch Enferm*. 2015; 35(Esp):127-34.
21. Frota MA, Mamede ALS, Vieira LJES, Albuquerque CM, Martins MC. Práticas culturais sobre aleitamento materno entre famílias cadastradas em um programa de Saúde da Família. *Rev Esc Enferm USP*. 2009;43(4):895-901.
22. Xavier BS, Nobre RG, Azevedo DV. Amamentação: conhecimento e experiência de gestantes. *Nutrire*. 2015;40(3):270-7.
23. Melo MCP, Luna ICF, Gomes AIR, Bastos LDM, Bringel NMM. Aleitamento materno e suas particularidades: uma abordagem teórico-prática sobre o tema. *Enciclopédia Biosfera*. 2010;6(11):1-11.
24. Vendruscolo JF, Bolzan GM, Crestani AH, Souza APR, Moraes AB. A relação entre aleitamento materno e transição alimentar e os indicadores de risco para o desenvolvimento infantil. *Disturb Comun*. 2012;24(1):41-52.
25. Cunha LEO, Soares AED, Costa GA, Lessa NMV. As desvantagens da introdução alimentar precoce e/ou tardia de alimentos complementares. In: *Anais do 3º Congresso de Ciências da Saúde, 12º Semana de iniciação Científica e 3º Semana de Extensão; Coronel Fabriciano. Minas Gerais: UNILESTE/MG; 2011.*
26. Toloni MHA, Silva GL, Goulart RMM, Taddei JAAC. Alimentação nos primeiros anos de vida: o advento dos alimentos industrializados. *Pediatr Mod*. 2014;50(4):155-61.
27. Duncan BB, Chor D, Aquino EML, Bensenor IM, Mill JG, Schmitd MI, et al. Doenças crônicas não transmissíveis no Brasil: prioridade para enfrentamento e investigação. *Rev Saúde Pública*. 2012;46(Supl 1):126-34.

First author's address:

Juliana de Brito de Souza Rosa
Universidade Luterana do Brasil
Av. Farroupilha, 8001
Bairro: São José
CEP 92425-900 - Canoas - RS - Brasil
E-mail: fga.julianabrito@gmail.com

Mailing address:

Susana Elena Delgado
Universidade Luterana do Brasil
Av. Farroupilha, 8001
Bairro: São José
CEP 92425-900 - Canoas - RS - Brasil
E-mail: sudel.ez@terra.com.br