

# ASSESSMENT SCALE OF NEWBORN SUCKING FOR BREASTFEEDING

## *Instrumento de avaliação da sucção do recém-nascido com vistas a alimentação ao seio materno*

Patrícia das Graças Mosele<sup>(1)</sup>, Jordana Ferreira dos Santos<sup>(2)</sup>, Vanessa Cristina de Godói<sup>(3)</sup>,  
Francine Marson Costa<sup>(4)</sup>, Plínio Marco De Toni<sup>(5)</sup>, Cristina Ide Fujinaga<sup>(6)</sup>

### ABSTRACT

**Purpose:** to evaluate the accuracy of the “Assessment sucking scale to newborn in breastfeeding”. **Methods:** this is a diagnostic study. The “Assessment sucking scale to newborn in breastfeeding” was drawn from an existing instrument, has been validated. The study included 152 mothers / newborn hospitalized in rooming in care. The study was divided into two stages, the first stage adaptation of the instrument and the second validation of the “Assessment sucking scale to newborn in breastfeeding” itself. For comparison between the instruments, it was considered as the gold standard “Protocol assessment of breastfeeding” proposed by UNICEF. Statistical analysis was applied to test the association chi square (first stage) and building the “Receiver Operating Characteristics” curve (second stage). **Results:** in the first phase, the “Assessment sucking scale to newborn in breastfeeding” was drawn from the behavior of newborns who were associated with breastfeeding, consisting of items posture, movement and cupping tongue and jaw movement. However, in the second stage, it was found that “Assessment sucking scale to newborn in breastfeeding” has a poor accuracy and is not a predictor of the behavior of the newborn in the breastfeeding. **Conclusion:** the “Assessment sucking scale to newborn in breastfeeding” cannot be considered a predictor of behavior newborn in the breastfeeding.

**KEYWORDS:** Breast Feeding; Sucking Behavior; Validation Studies

### ■ INTRODUCTION

Breast milk is the only food children need right after birth and the World Health Organization (WHO) recommends exclusive breastfeeding until the child's sixth month, and thus, until this age infants should only have breast milk and no other complementary food or drink is necessary. From six months onwards all children should receive complementary foods and

continue to breast feed until their second year of life or longer<sup>1</sup>. Even though there is a common sense and scientific consensus that breast milk and the act of breastfeeding are best for mothers and their children, many children are taken off breast milk prematurely and fed with substitutes for breast milk, using bottles<sup>2</sup>. Studies show that the use of bottles during the child's first month is very common<sup>3</sup>.

In regard to maternal allegations concerning premature weaning, social, biological, cultural and economic factors are verified<sup>4</sup>, problems such as “lack of milk”, “weak milk”, breast disorders, infant's refusal to latch, disorders in the mother/newborn position, as well as the presence of certain illnesses in women and the increase in female participation in the work force<sup>5</sup>. Other reasons that explain premature weaning may be suggested, and these would be connected to the environment, to the mother's personality, to her emotions, her relationship with

(1) Mid-West State University – UNICENTRO, Irati, PR, Brazil.

(2) Criança Esperança Special Education School in Indianópolis, Irati, PR, Brazil.

(3) Tuiuti University, Curitiba, PR, Brazil.

(4) Mid-West State University – UNICENTRO, Irati, PR, Brazil.

(5) Mid-West State University – UNICENTRO, Irati, PR, Brazil.

(6) Mid-West State University – UNICENTRO, Irati, PR, Brazil.

Conflict of interest: non-existent

her husband and family, cultural influences and her answers to the different problems in daily life<sup>6</sup>.

In order to increase the prevalence of breastfeeding, interdisciplinary actions of encouragement towards breastfeeding must begin as early as possible, beginning in prenatal follow-up appointments and should continue after the infant's birth. Thus, surpassing the obstacles for breastfeeding also depends on the capacity of health professional and services to make their practices adequate to the sociodemographic and epidemiological context, increasing the possibilities that the current model of assistance offers concerning the support given to women in their decision to breastfeed their children. The interventions should also provide mothers with the opportunity to acquire practical skills related to breastfeeding, in order to minimize initial difficulties<sup>6,7</sup>.

The first experiences in the maternity ward are especially important for the success of breastfeeding. The work of Speech-Language Pathologists in maternity wards, as a part of national public policies of support, encouragement and protection of breastfeeding is recent and there are no assessment instruments that are specifically developed for breastfeeding and have been submitted to a validation process. The development of instruments that will assess breastfeeding, specifically in regard to sucking function is believed to be extremely important. Thus, the purpose of this study was to test the accuracy of the "Assessment scale of newborn sucking during breastfeeding".

## ■ METHODS

The project was approved by the Research Ethics Committee at UNICENTRO, under number 231/2009.

This is a diagnostic study. Data collection occurred in the room-in section of the maternity ward of the Santa Casa hospital in Irati-PR that has been considered a "Child Friendly Hospital" since August 2010. Rooming-in is a hospital system in which the newborn, without clinical complications after birth, remains by his mother 24 hours a day until hospital discharge, enabling all assistance care and guidance for the mother concerning the health of the binomial mother/newborn<sup>8</sup>. In this hospital the unit is composed of 24 rooms, of which 17 are funded by the Public Health System. The data were collected only from those rooms of the Public Health System.

The sample was composed of 152 mother/newborn binomials. The inclusion criteria were: healthy newborns, born at term, with an Apgar score greater than 7 in the first minute and whose

mothers wished to breast feed their children. The exclusion criteria were: babies with craniofacial anomalies, syndromes, cardiac pathologies or respiratory disorders that would interfere negatively in breastfeeding. Mothers with organic impediments that were advised against breastfeeding were also excluded.

In order to assure a homogenous data collection, the instrument was conducted with all mothers in sitting position with support for their arms and/or legs, at a time when the newborn was hungry, that is, a minimum of 2 to 3 hours since the last feeding. The newborns were alert or sleeping lightly. In case the newborn was in profound sleep, he was awoken with auditory and tactile stimulation. If the newborn was crying or agitated, the assessment was not conducted.

Thus, the evaluations were conducted without considering the first feeding in the delivery room, and respecting a period of at least 24 hours for babies born of natural delivery, and 48 hours for surgical delivery, so that all mothers were presumably in similar recovery conditions and disposition for breastfeeding.

The data were collected in two stages, by three researchers who were trained by the author of the assessment instrument. The training was based on the conduction of the instrument in pairs, composed by the author of the instrument and the involved researchers. A pilot study was conducted in this stage with the inclusion of 20 newborns, though these data were not considered. After training, the researchers had an agreement of over 90% of observations with the author of the instrument.

During the first stage of data collection, the "Assessment instrument of readiness of premature babies to begin oral feeding"<sup>9</sup> was conducted in 76 mother/newborn binomials. This is a validated assessment instrument developed in order to verify the readiness for breastfeeding in premature babies. The instrument is composed of the following 18 items: corrected age; state of consciousness; global posture and tone; lip and tongue posture; search, sucking, bite and gag reflexes; tongue movement and cupping; jaw movement; sucking force; sucking in pauses; maintenance of sucking pace in pauses; maintenance of alert state and signs of stress. Each category is composed of items with performance variations that receive scores ranging from zero to two that will add up to a total that may vary between zero and 36. For assessment, the newborn was positioned lying on his side, in the crib, and sucking was assessed using the evaluator's fifth finger covered by a glove.

After this assessment, the newborn was placed on the mother's breast for feeding. The pair's

assessment in breastfeeding was conducted using the “UNICEF Protocol for breastfeeding observation”. This protocol is composed of five categories among favorable behaviors and those indicating difficulties in the beginning of successful breastfeeding, among which are: position, responses, establishment of affectionate bonds, anatomy and sucking. This protocol is considered a gold standard in the assessment of the pair’s performance during breastfeeding.

Difficulty in breastfeeding was considered upon the presence of at least one such sign as identified during the conduction of the UNICEF protocol. This choice was made since breastfeeding is understood as a dynamics process involving the mother/newborn pair. Thus, even if there was only one sign of difficulty, it was understood that it could indicate a disorder in the interaction between the pair and could consequently interfere in the success of this process.

The results of both protocols were compared and the association among the variables was verified using the Chi-square test. Thus, for the second phase of data collection a new instrument was used composed only by the variables that showed an association in the first stage of the study: posture,

movement and cupping of the tongue and jaw movement of the newborn.

A total of 76 mother/infant binomials participated in this stage with the conduction of the new protocol composed of only four evaluation items (posture, movement and cupping of the tongue and jaw movement). The procedures of breastfeeding observation were the same as in the first stage. A Receiver Operating Characteristics (ROC) curve was traced based on the obtained data, in order to verify the accuracy of the new instrument.

The data were analyzed in the Social Package for the Social Sciences (SPSS) software, version 13.0.

## ■ RESULTS

Of the 152 binomials, it was verified that 45% did not have any difficulties during feeding when assessed by the UNICEF protocol. However, 55% of the pairs had at least 1 (one) difficulty in breastfeeding, as may be observed in Figure 1. All cases where disorders in breastfeeding were observed were assisted by the health team of the room-in ward.

**Assessment scale of newborn sucking during breastfeeding**

Date: \_\_/\_\_/\_\_

Identification:

Name: \_\_\_\_\_ Record Number: \_\_\_\_\_

Date of Birth: \_\_/\_\_/\_\_ Days of life: \_\_\_\_\_

**Oral Posture**

Tongue posture (2) flat (0) elevated (0) retracted (0) protruded

**Non-nutritive sucking** (The test should last 1 minute)

Tongue movement (2) adequate (1) altered (0) absent

Tongue cupping (2) present (0) absent

Jaw movement (2) adequate (1) altered (0) absent

Score: \_\_\_\_ Maximum score: 8

**Instructional Guide****Assessment scale of newborn sucking during breastfeeding****Oral Posture****Tongue posture** (observed through lower lip lowering and, if necessary, jaw lowering)

- Flat: flat tongue, position inside the oral cavity, with rounded tip.
- Elevated: Elevated tongue tip, pressuring the palate.
- Retracted: retracted tongue in the oral cavity.
- Protruded: protruded tongue in the oral cavity, superimposed on the lips.

**Non-Nutritive Sucking****Tongue Movement**

- Adequate: anteroposterior and coordinated movement of the tongue after intraoral stimulation.
- Altered: posteroanterior or uncoordinated movement after intraoral stimulation.
- Absent: absence of movement.

**Tongue Cupping**

- Present: elevation of lateral sides and presence of a sulcus in the center of the tongue.
- Absent: absence of response.

**Jaw Movement**

- Adequate: reduced excursion of the jaw, with rhythmic and soft mandibular amplitude.
- Altered: wide jaw excursion and/or with arrhythmic excursion and/or jaw locking.
- Absent: absence of movement.

Description of the pair's unfavorable behaviors	Pairs	
	21	
Infant's body is far from the mother's body	6	
Infant has a twisted neck	5	
Infant's chin does not touch breast	5	
Only shoulders/head are supported	3	
Responses	No response to the nipple	4
	No search observed	6
	Infant shows no interest in the breast	8
	Infant is crying or agitated	13
	Infant does not maintain latch to the areola	26
	No sign of milk ejection	2
Affectionate bonding	Mother holds infant nervously, shaking her, trembling or weakly	13
	No mother/child eye contact	8
	Mother and infant barely touch	12
Anatomy	Swollen and hard breasts	1
	Flat or inverted nipples	10
	Bruised, fissured or red breast tissue	33
	Stretched or fallen breasts	1
Sucking	Mouth nearly closed, lips protruding	17
	Inferior lip turned inward	20
	Infant's tongue cannot be seen	18
	Tense or contracted cheeks	16
	Fast sucking, with snap sounds	5
	Loud noises may be heard, but not swallowing	5

**Figure 1 – Description of unfavorable behaviors upon the conduction of the UNICEF breastfeeding assessment protocol**

The first stage of the study had the participation of 76 mother/infant pairs. The results obtained from the conduction of both instruments were compared. In order to verify the association of the items, the

Chi-square test was administered with significance level of 95%. The items that showed association were posture, movement and cupping of the tongue and jaw movement, as shown in Figure 2.

Item	Chi-Square Value	p-value
Corrected age	-	-
State of consciousness	0.063	0.802
Global posture	-	-
Global tone	-	-
Lips posture	2.463	0.117
Tongue posture	7.534	0.006*
Search reflex	2.145	0.342
Sucking reflex	1.093	0.296
Bite reflex	3.385	0.066
Gag reflex	-	-
Tongue movement	13.793	0.000*
Tongue cupping	14.114	0.000*
Jaw movement	21.228	0.000*
Sucking force	2.832	0.092
Sucking on pauses	7.674	0.022
Rhythm maintenance	4.395	0.036
Alert state maintenance	0.012	0.914
Signs of stress	-	-

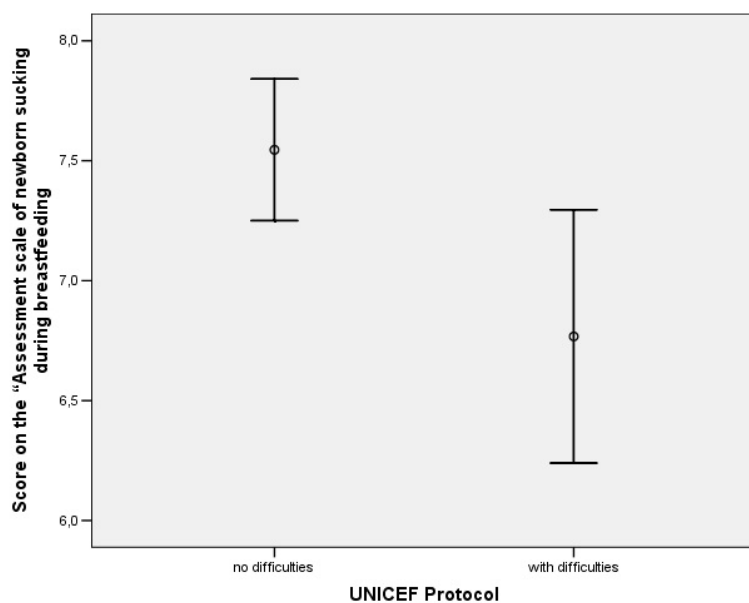
- No variation in newborn's responses

\*p<0.01 (statistically significant)

**Figure 2 – p-value results from the chi-square test for the association of items from the “Assessment instrument of readiness of premature babies to begin oral feeding” and performance of the mother/ infant pair in the breastfeeding assessment proposed by UNICEF**

Seventy six binomials participated of the second stage. The new instrument created in the first stage of the study was conducted once again in order to verify its accuracy. As the new instrument has four

items, the score ranged from zero to eight points. The data collection procedures were similar to those in the first stage, so this instrument was completed by the observer and compared to breastfeeding.

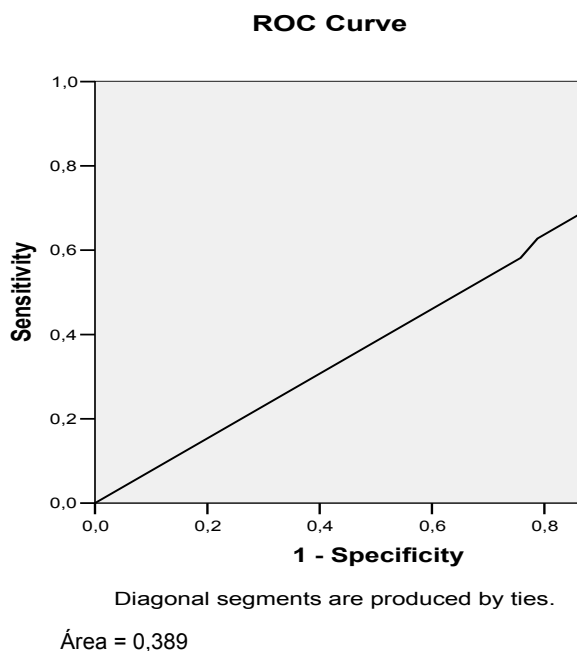


**Figure 3 – Comparison between score in the “Assessment scale of newborn sucking during breastfeeding” and the “Breastfeeding Assessment – UNICEF”**



It was verified that the mean score of the binomials with no difficulties in breastfeeding was 7.55 points ( $sd \pm 0.83$ ), while the mean score of those with difficulties was 6.77 points ( $sd \pm 1.72$ ), considering a confidence interval of 95%. Statistical analysis indicated a significant difference between the groups ( $U=552$ ;  $p=0.05$ ).

In regard to the ROC curve, it was seen that the accuracy was only 39%, showing that the "Assessment scale of newborn sucking during breastfeeding" may not be considered a predictor of the infant's behavior on the mother's breast.



**Figure 4 – ROC Curve drawn from the sum of the score of the binomials for the items of the instrument, against the gold standard**

## ■ DISCUSSION

It was seen that 55% of the pairs had at least one sign of difficulty in breastfeeding, showing a high prevalence of disorders in the mother's position and in the newborn's latching that at first would not have difficulty in initial breastfeeding. This high prevalence may be attributed to the way in which feeding was considered in this study. The protocol by UNICEF assesses several aspects of breastfeeding, and not only issues solely concerning sucking, which may have interfered in the results. It is believed that breastfeeding is a complex process that should not be minimized to the function of sucking<sup>10</sup>. Therefore, it should be stressed that the high prevalence of

initial difficulties in breastfeeding presented by the binomials should be a focus of attention of professionals. There is a need to review the actions of health professionals who care for this clientele, especially in regard to broadening their view and the assistance to these binomials, considering all their aspects, in order to promote integral and humanized assistance<sup>11</sup>.

The difficulties that were most commonly present regarded the mother have "tensed shoulders and inclined over the infant", "infant does not maintain latch on the areola", "breast tissue with bruises, fissures or redness" and "sucking: mouth almost closed lips protruding forward, inferior lip turned inward, infant's tongue cannot be seen and tense or contracted cheeks". The findings are similar to those in another study<sup>12</sup> where 100 mother/infant binomials were assessed using the UNICEF protocol. In spite of the different forms of result interpretations, 20 to 60% of the pairs had initial difficulties in breastfeeding: sucking adequacy, bad body posture of mother and infant during feeding; anatomy aspect of the breasts, the pairs' responses and bonding. The difficulties were related to surgical delivery<sup>12-14</sup> and to the mother not having received previous information about breastfeeding<sup>12</sup>.

There was, in this study, a noteworthy high prevalence of breast fissures. It is recognized that breast disorders may be related to the newborn's bad latching to the areola. The child positioned with a twisted neck, child's chin far from the breast and child's lip turned inward were statistically significant for the occurrence of breast lesion in a similar study<sup>15</sup>.

Furthermore, the mother's tense posture should be another issue in discussion, as it may be related to the (lack of) desire to breastfeed. Before birth, the pregnant woman sees breastfeeding in a way where the motivation to breastfeed would be related to her own and her child's health and to the benefits of breastfeeding and of breast milk<sup>16</sup>. However, after the birth of their infant, mothers face difficulties in breastfeeding that may result in the abandonment of this practice, leading to premature weaning.

On the aspects discussed thus far, there is a study<sup>17</sup> that has concluded that success in breastfeeding is very much linked to the existence of a positive previous experience. This factor was not investigated in the present study. Thus, it is suggested that in future studies should include information about previous maternal experience in breastfeeding, since it is recognized that this variable may favor a spectrum bias.

Furthermore, previous information and guidance received by women are very important to the success in breastfeeding<sup>12,17</sup> as well as the control of hospital

routines such as the use of pacifiers and the administration of supplements<sup>18</sup>. It should be noted that at the place where data collection occurred, there are no pacifiers, infant bottles or dietary supplements since the Santa Casa Hospital of Irati obtained the "Child Friendly Hospital" title in August, 2010.

A study conducted with 15 mothers of children younger than one year of age in the State of Ceará<sup>19</sup> showed that the act of breastfeeding is still seen by the mothers as a female duty/responsibility that is stronger than her possibility and wish (or lack thereof) of doing this. Breastfeeding is more strongly related to a social obligation than to the result of a rational choice, motivated by the construction of knowledge of the advantages and benefits of breastfeeding to the mother, child, Family and State. There is a need for health education strategies that enable the development of critical awareness in cultural environments. In the same study, the participants' reports show a distance between the official speech of healthcare units and practice, which is singular, lived by each woman in her daily life, contributing to the process of premature weaning during the infant's first weeks or months<sup>19</sup>.

In order to avoid premature weaning, the assistance to the binomial during their stay in the room-in ward should be as complete as possible<sup>20</sup>. It is known that the function of sucking has great influence in breastfeeding<sup>12,21-23</sup>. In clinical practice, one of the difficulties found by professional is the lack of an instrument that will aid them in the assessment of term babies' sucking<sup>24</sup>. Currently, an evaluation of babies' lingual frenulum is proposed, hypothesizing that there is a relationship between the type of frenulum and breastfeeding. It should be mentioned that this is a study that is still being development<sup>25</sup>.

The present study showed that, in spite of sucking being important for breastfeeding, the evaluation of this function in the way it was conducted (non-nutritive, performed with a finger covered by a glove) may not be considered as a predictor of the process of breastfeeding.

The use of the UNICEF protocol is questioned, as well as the way in which its results were interpreted, and the influence of these procedures on the results. It is believed that the UNICEF protocol may be considered the gold standard for assessment of breastfeeding, and that it evaluates

breastfeeding as a process, where several aspects are considered. The suggestion for further studies is that the instrument proposed by the present study be compared to another assessment of sucking on the mother's breast, such as, for example, breast-oro-gastric tube<sup>26</sup> or translactation<sup>27</sup>, techniques that enable milk ingestion to occur through objective sucking.

Finally, it is worth highlighting the importance of the Health professional's attitude when faced with a mother who is about to breastfeed. Guidance alone is not enough to assure success in the process of breastfeeding<sup>28</sup>, and it is important to offer conditions for every mother to experience this process in a way that is pleasurable and efficient. Health professionals should be trained to act in the assistance to breastfeeding, in an approach that reaches beyond the biological field, understanding the nurturing mother in all her female aspects<sup>29</sup>. Women deserved to have their needs attended to and to be supported in their decision to breastfeed their child<sup>30</sup>. Good assistance, based on listening and good performance by the professional, enables the user to bond with the healthcare system. This bond improves health care since professional know their clients and their priorities, thus achieving the much longed for integral and human assistance<sup>11-31</sup>.

## ■ CONCLUSION

The "Assessment scale of newborn sucking during breastfeeding" may not be considered a predictor of the infant's behavior on the mother's breast.

Literature does not show other instruments of assessment of the term infant's sucking as a predictor for evaluation of breastfeeding to allow comparison and discussion in the present study. Therefore, it is believed that the present findings are an initiative for Speech-Language Pathologists and Audiologists in the field of Neonatology. New investigations should be conducted in order to contribute to the support and promotion of breastfeeding, providing subsidies for handling the feeding of babies on their mother's breasts.



**RESUMO**

**Objetivo:** avaliar a acurácia do “Instrumento de avaliação da sucção do recém-nascido na alimentação no seio materno”. **Métodos:** trata-se de um estudo diagnóstico. O “Instrumento de avaliação da sucção do recém-nascido na alimentação no seio materno” foi elaborado a partir de um instrumento preexistente, já validado. Participaram do estudo 152 binômios mãe/bebê, internados em alojamento conjunto. O estudo foi dividido em duas etapas, sendo a primeira delas de adaptação do instrumento e a segunda da validação do “Instrumento de avaliação da sucção do recém-nascido na alimentação no seio materno” propriamente dito. Para comparação entre os instrumentos, considerou-se como padrão ouro o “Protocolo de avaliação da mamada” proposto pelo UNICEF. Para análise estatística aplicou-se o teste de associação do Qui-quadrado (primeira etapa) e construção da Curva “Receiver Operating Characteristics”(segunda etapa). **Resultados:** na primeira etapa, o “Instrumento de avaliação da sucção do recém-nascido na alimentação no seio materno” foi elaborado a partir dos comportamentos do recém-nascido que apresentaram associação no seio materno, sendo constituído dos itens postura, movimento e canolamento de língua e movimento de mandíbula. Entretanto, na segunda etapa, verificou-se que o “Instrumento de avaliação da sucção do recém-nascido na alimentação no seio materno” apresenta uma acurácia inadequada, não sendo um preditor do comportamento do bebê no seio materno. **Conclusão:** o “Instrumento de avaliação da sucção do recém-nascido na alimentação no seio materno” não pode ser considerado um preditor do comportamento do bebê no seio materno.

**DESCRIPTORIOS:** Aleitamento Materno; Comportamento de Sucção; Estudos de Validação

**■ REFERENCES**

1. Organização Mundial da Saúde. Evidências científicas dos dez passos para o sucesso no aleitamento materno. Brasília: Organização Pan-Americana de Saúde; 2001.
2. Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Ações Programáticas Estratégicas. A legislação e o marketing de produtos que interferem na amamentação: um guia para o profissional de saúde. Departamento de Ações Programáticas Estratégicas. Brasília: Editora do Ministério da Saúde; 2009.
3. França MCT, Giugliani ERJ, Oliveira LD, Weigert EML, Santo LCE, Köhler CVet al. Uso de mamadeira no primeiro mês de vida: determinantes e influência na técnica de amamentação. Rev. Saúde Pública.2008;42(4):607-14.
4. Parizotto J, Zorzi NT. Aleitamento materno: fatores que levam ao desmame precoce no município de Passo Fundo. O Mundo da Saúde.2008;32(4):466-74.
5. Azeredo CM, Maia TM, Rosa TCA, Fonseca e Silva F, Cecon PR, Cotta RM. Percepção de mães e profissionais de saúde sobre o aleitamento materno: encontros e desencontros. Rev. Paul. Pediatr.2008;26(4):336-44.
6. Araújo OD, Cunha AL, Lustosa LR, Nery IS, Mendonça RCM, Campelo SMA. Aleitamento materno: fatores que levam ao desmame precoce. Rev.Soc.Bras.Fonoaudiol.2008;61(4):488-92.
7. Alves CIRL, Goulart EMA, Colosimo EA, Goulart LMHF. Fatores de risco para o desmame entre usuárias de uma unidade básica de saúde de Belo Horizonte, Minas Gerais, Brasil, entre 1980 e 2004. Cad. Saúde Pública.2008;24(6):1355-67.
8. Ministério da Saúde (BR). Programa Nacional de Incentivo ao Aleitamento Materno. Normas básicas para alojamento conjunto. Brasília: Ministério da Saúde; 1993.
9. Rossarola C, Menon UM, Scochi CGS, Fujinaga CI. Validade discriminatória do instrumento de avaliação da prontidão para início da alimentação oral de bebês prematuros. Rev. Soc. Bras. Fonoaudiol. 2009; 14(1):106-14.
10. Almeida JAG, Novak FR. Amamentação: um híbrido natureza-cultura. J. Pediatr. 2004;80(5): s119-s25.
11. Araújo RMA, Almeida JAG. Aleitamento materno: o desafio de compreender a vivência. Rev. Nutr.2007; 20(4): 431-8.
12. Marques MCS, Melo AM. Amamentação no alojamento conjunto. Rev. CEFAC.2008;10(2): 261-7.
13. Carvalhaes MABL, Correa,CRH. Identificação de dificuldades no início do aleitamento materno mediante aplicação de protocolo. J. Pediatr.2003;79(1):13-20.

14. Silveira RB, Albernaz E, Zuccheto LM. Fatores associados ao início da amamentação em uma cidade do sul do Brasil. *Rev. Bras. Saude Mater. Infant.*2008;8(1): 35-43.
15. Coca KP, Gamba MA, Silva RS, Abrão ACFV. A posição de amamentar determina o aparecimento do trauma mamilar? *Rev. Esc. Enferm. USP.*2009;43(2):446-52.
16. Takushil SA, Tanakal ACd'A, Gallol PR, Machado MA. Motivação de gestantes para o aleitamento materno. *Rev. Nutr.*2008;21(5):491-502.
17. Roig AO, Martínez MR, García JC, Hoyos SP, Navidad GL, Álvarez JCF, Pujalte MMC, González RGL. Fatores associados ao abandono do aleitamento materno durante os primeiros seis meses de vida. *Rev. Latino-Am. Enfermagem.*2010;18(3):373-80.
18. Fujimori E, Minagawa ÁT, Laurenti D, Marcondes MRMJ, Borges ALV, Oliveira IMV. Duração do aleitamento materno em menores de dois anos de idade em Itupeva, São Paulo, Brasil: há diferenças entre os grupos sociais? *Rev. Bras. Saude Mater. Infant.*2010;10(1):39-49.
19. 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.
20. Pilotto DTS, Vargens OMC, Progianti JM. Alojamento conjunto como espaço de cuidado materno e profissional. *Rev. Bras. Enferm.* 2009; 62(4):604-7 .
21. Valerio KD, Araujo CMT, Coutinho SB. Influência da disfunção oral do neonato a termo sobre o início da lactação. *Rev. CEFAC.*2010;12(3):441-53.
22. Costa CN, Ribeiro SLG, Mousinho RJ, Costa RAGM, Nemr K. Efetividade da intervenção fonoaudiológica no tempo de alta hospitalar do recém-nascido pré-termo. *Rev. CEFAC.*2007;9(1):72-8.
23. Sanches MT C. Manejo clínico das disfunções orais na amamentação. *J. Pediatr.* 2004;80(5):155-62s.
24. Araújo RMA, Almeida JAG. Aleitamento materno: o desafio de compreender a vivência. *Rev. Nutr.*2007;20(4):431-8.
25. Martinelli RLC, Marchesan IQ, Rodrigues AC, Berretin-Felix G. Protocolo de avaliação do frênulo da língua em bebês. *Rev. CEFAC.*2012;14(1):138-45.
26. Medeiros AMC, Oliveira ARM, Fernandes AM, Guardachoni GAS, Aquino JPSP, Rubinick ML, Zveibil NM, Gabriel TCF. Caracterização da técnica de transição da alimentação por sonda enteral para seio materno em recém-nascidos prematuros. *J. Soc. Bras. Fonoaudiol.*2011;23(1):57-65.
27. Aquino RR, Osório MM. Alimentação do recém-nascido pré-termo: métodos alternativos de transição da gavagem para o peito materno. *Rev. Bras. Saude Mater. Infant.*2008;8(1):11-6.
28. Domene SMÁ, Medeiros MAT, Martins PA. A dinâmica do aleitamento materno entre famílias em vulnerabilidade social: o que revela o sistema de busca ativa. *Rev. Nutr.*2011;24(1):71-7.
29. Müller FS, Silva IA. Representações sociais de um grupo de mulheres/nutriz sobre o apoio à amamentação. *Rev. Latino-Am. Enfermagem.*2009;17(5):651-7.
30. Monteiro JCS, Gomes FA, Nakano AMS. Amamentação e o seio feminino: uma análise sob a ótica da sexualidade e dos direitos reprodutivos. *Texto Contexto - Enferm.*2006;15(1):146-50 .
31. Shimoda GT, Silva IA. Necessidades de saúde de mulheres em processo de amamentação. *Rev. Bras. Enferm.*2010;63(1):58-65.

Received on: November 14, 2012

Accepted on: October 15, 2013

Mailing Address:

Cristina Ide Fujinaga

Rua Nossa Senhora de Fátima, 256 apto 2

Irati - PR - Brasil

CEP: 84500-000

E-mail: cifujinaga@gmail.com