

Content analysis and appearance of the speech therapy protocol of accompanying – breastfeeding

Análise do conteúdo e aparência do protocolo de acompanhamento fonoaudiológico - aleitamento materno

Andréa Monteiro Correia Medeiros¹, Hayane Santos Nascimento¹, Mirthys Karoline de Oliveira Santos¹, Ikaro Daniel de Carvalho Barreto², Elisdete Maria Santos de Jesus³

ABSTRACT

Purpose: Analyse the content and the appearance of the Speech Therapy monitoring protocol of breastfeeding; elaborating an instructional guide for it. **Methods:** Exploratory type quantitative study. Five evaluators participated in the study, with a broad experience in Speech Therapy related to Neonatology, who analyzed the content and appearance of the protocol that addresses maternal, neonatal and mother-infant dyad aspects, as well as general and Speech Language Therapy specific guidelines related to Breastfeeding. Statistical analysis was performed using the Validity and Content Index, with concordance level of 70%. In the second round, the instrument was analyzed by the same evaluators, using the Likert scale, with five positions (I fully agree, agree, disregard, disagree and totally disagree). **Results:** There were fifteen items added, seven modified, five excluded, and one added topic. A high level of agreement was obtained, with the answers distributed in agreed and fully agreed (92% -content and 100% - appearance). The description of the instructional guide was made from the analyzes version of the protocol. **Conclusion:** The content analysis and appearance of the protocol, as well as the elaboration of its instructional guide, intend to use in a consistent and systematic way in the speech-therapy field related to breastfeeding, addressing both the evaluation recording and the monitoring of the mother-infant dyad - born in the breastfeeding situation. It is important to carry out the next steps of protocol validation.

Keywords: Breast feeding; Speech-language therapy; Data accuracy; Validation studies; Health promotion

RESUMO

Objetivo: Analisar conteúdo e aparência do Protocolo de Acompanhamento Fonoaudiológico – Aleitamento Materno e elaborar um guia instrucional para o instrumento. **Métodos:** Estudo do tipo exploratório, de natureza quantitativa. Participaram cinco avaliadores especialistas, com ampla experiência em atuação fonoaudiológica relacionada à Neonatologia, que analisaram conteúdo e aparência do protocolo, que abordam aspectos maternos, neonatais e da díade mãe/recém-nascido, além de orientações gerais e específicas da Fonoaudiologia, relacionadas à amamentação. A análise estatística foi realizada por meio do Índice de Validade de Conteúdo, com nível de concordância de 70%. Na segunda rodada, o instrumento foi analisado pelos mesmos especialistas, por meio da escala de Likert, com cinco posições (concordo plenamente, concordo, indiferente, discordo e discordo totalmente). **Resultados:** Foram 15 itens acrescentados, sete modificados, cinco excluídos e um tópico adicionado. Obteve-se alto nível de concordância, sendo as respostas distribuídas em “concordo” e “concordo plenamente” (92% - conteúdo e 100% - aparência). A descrição do guia instrucional foi realizada a partir da versão analisada do protocolo. **Conclusão:** A análise do conteúdo e aparência do protocolo, bem como a elaboração do seu guia instrucional, pretendem possibilitar sua utilização de modo consistente e sistemático no campo fonoaudiológico relacionado ao aleitamento materno, abordando tanto o registro da avaliação, como do acompanhamento da díade mãe/recém-nascido, na situação de amamentação. Ressalta-se a importância de serem realizadas as próximas etapas da validação do protocolo.

Palavras-chave: Aleitamento Materno; Fonoaudiologia; Confiabilidade dos dados; Estudos de validação; Promoção em Saúde

Study carried out at Speech and Language Therapy course, Speech and Language Therapy Department, Universidade Federal de Sergipe – UFS – São Cristóvão (SE), Brasil.

¹Universidade Federal de Sergipe – UFS – São Cristóvão (SE), Brasil.

²Universidade Federal Rural de Pernambuco – UFRPE – Recife (PE), Brasil.

³Universidade Federal de Sergipe – UFS – Lagarto (SE), Brasil.

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Corresponding author: Andréa Monteiro Correia Medeiros. E-mail: andreamcmedeiros@gmail.com

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INTRODUCTION

Actions on the mother / newborn dyad that provide care in the early hours of lactation are necessary to address the benefits of breastfeeding (BF), to establish early breastfeeding and its maintenance, as BF involves biological, physical and social, providing benefits for the newborn development (NB)⁽¹⁻³⁾.

The speech therapist role in maternity wards has been fundamental for the dyad well-being promotion and BF effectiveness, providing guidance to the infants on the impact that the suction in the mother's breast (MB) exerts on the orofacial development⁽⁴⁾, besides being a moment to orient on the stimulation of the language, care with the NB hearing, as well as the bond mother/NB establishment during the BF⁽⁵⁾.

The Protocol of Speech-Language Pathology and Audiology - Breastfeeding⁽⁶⁾ makes it possible to record the longitudinal monitoring of the binomial, during the hospital stay. It contemplates three observations: mother, NB and situation of BF. It also addresses general and speech-language interventions, as fundamental tools in the transfer of information, through the assistance of professionals⁽⁷⁾. However, although it is already used in some hospital routines, it has not yet been validated and does not have an instructional guide.

The validation of instruments is becoming an important factor in the research, in the sense of evidencing the capacity that the measure has to capture or reveal a certain phenomenon⁽⁸⁾. Content analysis is characterized by the determination of the representativeness of items that a content expresses, based on the judgment of experts in a specific area. This determines if the content of an instrument effectively explores the requirements for measuring a particular phenomenon to be investigated⁽⁹⁾. The analysis of appearance or face allows to identify if the instrument items encompass the proposed terms clearly and correctly and if the format is appropriate⁽⁸⁾.

Considering the scarcity of validated instruments that intend to evaluate and monitor the situation of BF and, above all, that they consider aspects inherent in Speech Therapy, the present study had the objective of analyzing the Protocol of Speech-Language Pathology and Audiology - Breastfeeding⁽⁶⁾ content and the appearance in addition to developing an instructional guide for the instrument.

METHODS

Exploratory study, of a quantitative nature, inserted in the project "Breastfeeding and Health and Speech-Language Pathology", approved by the Research Ethics Committee of the Universidade Federal de Sergipe under n°. 45411315.6.0000.5546/2016. There was prior authorization for the use of the protocol "Speech-Language Pathology - Breastfeeding", by the authors, for validation purposes, which, in the present work, covered the content analysis and protocol appearance, besides the elaboration of its instructional guide.

The selection of the expert evaluators, for the content analysis and the protocol appearance, was carried out from the Lattes Curriculum survey of each possible candidate. As an inclusion criterion, the evaluator should be a speech therapist,

with a minimum degree of master, a period of performance of more than five years, a teaching activity in Speech-Language Pathology and BF issue. The exclusion criterion was related to the professional's inability to participate in the research (rejecting the invitation and / or not fulfilling the requested deadlines).

The identification of the possible participants resulted in the construction of a framework that met the established criteria. Of seven professionals who initially agreed to participate, two did not deliver the requested material, and then, composed of five experts, the final framework.

The present study was carried out in three stages:

Stage I: Instrument Analysis (first round) - Submission of the original protocol⁽⁶⁾ (Annex 1) to the group of expert evaluators in the field of Speech-Language Pathology and Audiology, to analyze content and appearance.

This stage exposed the protocol to subjective judgments, using the Delphi technique, to analyze the contents covered, to update the nomenclatures adopted and to measure the capacity of its use to evaluate and follow the BF situation. The Delphi technique consists of a methodological research strategy that seeks to obtain the maximum consensus of a group of experts on a given topic, when unanimity of opinion does not exist due to the lack of scientific evidence or when there is contradictory information⁽¹⁰⁻¹²⁾. It is also considered an appropriate technique for establishing content analysis of instruments⁽¹³⁾, by systematically listening and analyzing expert opinions, with the possibility of generating, at the end of the analysis, a validated product⁽¹⁰⁾. Validity measures exactly what the instrument proposes to measure⁽¹⁴⁾.

The opinion of the first round was expressed in an evaluation sheet prepared by the researchers, sent to the electronic address of each of the experts, containing dichotomous questions (yes/no) to be indicated, as well as fields to justify the answers. There was also a brief questionnaire at the end, to characterize the judges, covering identification data and professional performance. Based on the responses received, the content validity index (CVI) was applied and the level of agreement was measured.

Stage II: Reformulation of items (protocol adequacy) - Reformulation and / or exclusion of items that obtained low concordance index in the first round.

All opinions obtained in the first round were tabulated in Microsoft Excel 2013®. Afterwards, a descriptive analysis of the responses was performed, and the items that had agreement below 70% (<0.7) were altered or excluded, through the pertinence of the judgments described by the reviewers and with the consent of the authors.

The data analysis was established by the application of the CVI, which aims to establish consensus among a group of experts regarding a specific area⁽¹⁵⁾, based on the structured use of their knowledge, experience and ability. These characteristics, when properly organized, predict that collective judgment is better than individual opinion⁽¹⁵⁾.

The closer the agreement approaches 100%, the higher the compliance rate. To be considered satisfactory, the CVI should be greater than 0.7 (> 0.7).

Stage III: Reevaluation of the instrument (second round) - Submission of the reformulated instrument to the group of evaluators for a new content analysis and appearance.

The instrument was sent back to the evaluators, with the adjustments suggested in the first evaluation round. A new evaluation sheet was sent, with the Likert scale, to obtain the final opinion, presenting five positions: 1 - fully agree; 2 - agree; 3 - indifferent; 4- disagree; 5 - fully disagree.

An instructional guide for application of the protocol was also elaborated, aiming at standardization in the registry, through the descriptions of each instrument item.

RESULTS

The panel of experts was composed of five Speech Therapy professionals, with experience in encouraging BF and teaching in the area, adding to the study a vast amount of experience.

All the evaluators were female, over 50 years of age, mostly with teaching and acting time in the incentive to the BF superior to 30 years, holding titles of doctor and postdoctor, distributed among Brazilian states. All the specialists have already performed in a hospital environment, evidencing, besides the academic knowledge, assistance routine knowledge.

Based on the valid answers of each specialist, the results were organized regarding the maternal, neonatal and mother / newborn

dyad aspects, as well as general and specific guidelines of Speech-Language Pathology, related to breastfeeding.

Regarding the mother's identification data, clinical history, prenatal follow-up, NB characterization and general data, all items obtained agreement less than 70%, CVI <0.7.

Regarding the mother's observation data, several items obtained agreement less than 70%, CVI <0.7, as far as the aspects related to the availability and conditions for the BF, as well as the breasts and nipples conditions, as presented in Table 1.

In the second round of protocol evaluation, containing the reformulated items, a high level of agreement was obtained from the experts, and responses were distributed almost entirely (92%) in the "agree" and "fully agree" options, such as detailed in Table 2.

All reviewers agreed with the instrument's appearance regarding the items' formatting, distribution and clarity, with all responses (100%) positive (I fully agree = 40% and agree = 60%).

The finished version of the content and appearance (Annex 2) is presented, followed by the instructional guide that was prepared.

The instructional guide provides guidance on the items in the protocol. It aims to guide the aspects involved in the instrument observation and recording, minimizing errors during the application⁽¹⁶⁾.

Table 1. Agreement percentage between specialists and Content Validity Index referring to the mother's observation data: availability and conditions for breastfeeding; breast conditions; nipples conditions

ITEM	YES	NO	Agreement	CVI
Mother's observation data	N	N	%	
Availability and conditions for breastfeeding				
Motivated	3	1	75	0.75
Quiet	3	1	75	0.75
Open to orientation	2	2	50	0.5*
General well-being	2	2	50	0.5*
Requested aid	2	2	50	0.5*
Demotivated	3	1	75	0.75*
Unsure	3	1	75	0.75*
Indifferent	3	1	75	0.75*
With pain	3	1	75	0.75*
Not intended for breastfeeding	3	2	60	0.6*
Breast conditions	N	N	%	
Suitable	2	3	40	0.4*
Ingurged	3	1	75	0.75
Sore	4	0	100	1.0
Febrile	4	1	80	0.8
Nipples conditions	N	N	%	
Suitable	2	2	50	0.5
Very prominent	2	3	40	0.4*
Slightly prominent	2	3	40	0.4*
Flat	5	0	100	1.0
Inverted	3	1	60	1.0
Cracking process	4	1	80	0.4*

*Tests: CVI (Content Validity Index); **Subtitle:** N = frequency of valid answers; % = Agreement index with valid answers; YES = Data were sufficient and contemplated what they propose to evaluate; NO = Items should be reformulated, withdrawn and/or did not meet the aspect addressed

Table 2. Agreement percentage issued by the evaluators, referring to the changes made in the Speech-Language Pathology Protocol

ITEM	I fully agree		I agree		I disagree	
	N	%	N	%	N	%
Identification data and clinical history	1	20	4	80	—	—
Mother's availability and conditions for breastfeeding	2	40	3	60	—	—
Breast conditions	2	50	1	25*	1	25
Nipples conditions	3	60	2	40	—	—
Readiness for breastfeeding	1	20	4	80	—	—
Breastfeeding situation	1	20	4	80	—	—
Handle	1	20	4	80	—	—
Suction	1	20	4	80	—	—
Suction/Swallowing/Breathing	1	20	4	80	—	—
General Interventions	2	40	3	60	—	—
Speech-language interventions	1	20	3	60	1	20

*Tests: CVI (Content Validity Index); **Subtitle:** N = frequency of valid answers; % = Agreement index with valid answers

Instructional Guide: Speech Therapy Follow-up Protocol - Breastfeeding

Identification data and clinical history

Identification data and clinical history should be collected in medical records and / or direct interview with the mother.

The identification data aim to characterize the dyad profile, including the language to be used. They also aim to recover gestational history and postpartum and / or prepartum interferences that may interfere with breastfeeding (MA)

Mothers's observational data

Availability and conditions for breastfeeding

Attentive to the guidelines / explanations: Shows interest. It maintains visual contact with the examiner and presents facial expressions of acceptance. Eventually, talks about experiences, knowledge and beliefs about the CRC and / or explicit their doubts;

Indifferent to guidelines / explanations: Not interested. Does not make verbal and / or visual contact with the examiner. It does not express any comments about the guidelines and / or doubts;

General well-being / healthy: It does not mention physical, global and / or generalized pains for surgical reasons;

With pain: It refers to physical, global and / or generalized pain, for surgical reasons;

Requested aid: Request intervention (evaluation or help in the feeding) of its own free will.

Breast conditions

Suitable: Soft to the touch, no pain and nipple traumas;

Sore: Spontaneous pain and / or to the touch of the examiner, being uncomfortable during the suctioning of NB in the breast;

Ingurged: They are presented with excess milk, hardened, quite voluminous, with bright and / or touch sensitive skin;

Febrile: They are presented with high temperature (perceptible to the touch) and / or reddish, with sensation of burning.

Nozzles conditions (nipples)

Suitable: They are able to handle by NB, do not present injuries and do not require maneuvers for adequacy;

Flat: Slightly evident. NB may cause difficulty to achieve or maintain the handle;

Very prominent: Evident, well salient, elastic. Allow easy grip by NB;

Inverted: Nozzles do not protrude, are turned inward, need stimulation (maneuvers of adequacy);

Cracking process: Presence of wounds and / or bleeding.

Milk characteristics

Colostrum: Clear and small amount of coloring (usually produced during gestation and the first postpartum days);

Milk ejection: Intense flow of milk, whitish and / or yellowish color;

Without milk descent: There is no milk production, even after breast stimulation.

Newborn's observational data

Behaviorial state

Deep sleep: Regular breathing; eyes closed, without presence of nystagmus; absence of spontaneous motor activity⁽¹⁷⁾;

Light sleep: Irregular breathing; eyes closed, with movement; occurrence of eye opening; low level of motor activity⁽¹⁷⁾;

Sleepy: Eyes generally open (blurred), with heavy, trembling and / or closed eyelid; level of spontaneous and soft motor activity⁽¹⁷⁾;

Alert: Eyes open (bright eyes) or closed, with clear concentration activity; low level of global motor activity⁽¹⁷⁾;

Angry: Eyes open or closed (tight), with high level of motor activity. Grunts and vocalizations may occur⁽¹⁷⁾;

Crying: Eyes closed (tight); high level of motor activity; presence of startle and / or tremors; intense cry⁽¹⁷⁾.

Readiness for breastfeeding

Pursuit reflex: When the lips and/or cheeks are stimulated, NB moves the face towards the stimulus, with mouth opening⁽¹⁷⁾;

Suction movement: Visualization of retraction and rhythmic movements in the buccal region (cheeks);

Palmar grip: Firm hand-closing movements;

Take your hands to the midline: NB takes one or both hands toward the body midline;

Bring your hands to the face: NB places and / or supports the hand (s) on the face.

Observation of the breastfeeding situation

The times (initial and final) where the NB has been placed in MB must be recorded. The time spent with breaks and breaks should be deducted from the feed total duration. Duration refers to the actual time of breastfeeding.

Positioning

Sitting, lying or standing: Positions taken by the mother (both in the bed and in the chair/armchair);

Relaxed: The mother remains apparently without tension in the shoulders and/or arms, when holding / supporting the NB;

Tense: Shoulders erect, arms flexed, with upper limb tension, when holding/supporting NB;

Body contact (belly with belly): NB belly in direct contact with the mother's belly;

NB Head raised in relation to the body: The head of the NB is higher than the trunk, and may be supported on the mother's arm, or on some raised surface;

NB Head aligned, relative to the body: The head of the NB should be centered in the same direction of the trunk and buttocks, without rotation towards the sides.

Handle

Effective handle: NB keeps chin against breast, lower lips slightly inverted and lip seal around nipple. Absorption of the nipple-areolar complex.

Uneffective handle: Loosening of the nipple occurs during breastfeeding;

Snap part of the areola: The NB grazes the nipple along with part of the areola (area corresponding to the mammary ducts);

Nipple only: NB does not pinch the nipple-areolar region and usually maintain suction in the beak.

Suction pattern

Effective sucking: Harmonic suction, with rhythm, strength and support. Mandible performs coordinated posteroanterior movements.

Suction with long breaks: Suction groups with visualization of buccinator activation muscles, pauses lasting more than 7 seconds⁽¹⁷⁾;

Sucks and soon falls asleep: Small sucking groups and NB progression to sleep behavioral status, making feeding ineffective due to short duration;

Does not suck: No activation of the buccinator muscles is observed and no suction movement.

Coordinated movements of mandible: NB performs coordinated rhythmic movement, posteroanterior of mandible.

Slow sucking: NB sucks at slow and slow pace, usually with long pauses (longer than 7 seconds).

Does not suck: It is not possible to visualize jaw and cheek movements (region corresponding to buccinator muscles), even if the NB is performing the correct handle.

Suction/Swallowing/Breathing (S/S/B)

Coordination S/S/B: NB sucks, swallows and breathes in the time of one suction per second, in coordinated pattern. The tongue assumes a more anterior position to perform the swallowing movements and, upon reaching the soft palate, the milk deflagrates the swallowing reflex, synchronized with the respiratory pauses⁽¹⁸⁾;

Incoordination S/S/B: NB does not present the S/S/B standard coordination. Usually interruption of the feeding takes place, with long pauses to breathe / swallow and may present, sobs, gagging and / or movements of head extension, causing the grip;

Choking: NB presents gagging during breastfeeding, followed or not by the cough reflex. They may be accompanied by other clinical signs such as changes in color and heart rate.

Mother/newborn bond

Keeps eye contact: Mother looks at the NB continuously, during the blowjob;

Smile: Mother explains positive reactions and / or smiles, during breastfeeding;

Touch / caring / body contact: There are caresses of the mother in NB and / or there is body contact between both during breastfeeding;

Conversation: Mother speaks spontaneously with NB and / or makes use of affective language (gestural or not) and peculiar between the two.

General interventions

There was necessity of awakes NB: NB is awakened from sleep, to be able to start or continue the feeding. Usually remove your clothes, make firm touches on body parts (abdominal region and extremities - feet and hands);

Could not wake up the NB: Even with strategies to wake NB, it does not wake up from sleep and does not change its behavioral state;

Mother positioning aid: Postural adjustment performed with the mother, such as putting support on the back and / or arms and / or adjusting the way of holding NB more comfortably;

NB positioning aid: Postural adequacy performed with the NB, such as positioning the NB with belly body contact with the belly and / or lifting the NB head with respect to the body;

Aid in the handle adequacy: Perform maneuvers to the NB perform the correct handle (snatch the nipple-areolar complex);

Suitability / nipple training (nipple): Massages with the fingers tip (thumb and forefinger), starting in the areola region until reaching the nipple;

Maneuvers for the descent of milk: Performing massages in circular and firm movements with the fingers, from the region closest to the areola to the most distant of the breast, for lactiferous channels stimulation;

Guidance on the exchange of breasts: NB should completely empty one breast before being put in the other, because the posterior milk assists in the weight gain of NB, because it is rich in fat;

Guidance on cracking prevention: Guidance is on the correct handle. The incorrect grip (nipple only) may be associated with cracking.

Orientation on NB positioning: The NB should preferably be facing the mother, maintaining body contact belly with belly, head raised and supported on the puerpera's arm;

Guidance on the mother's position: The mother should feel comfortable and be seated, with her feet flat on the floor and the upright spine.

Speech-language interventions

Language (relationship development and importance): The act of talking, singing, or telling stories must occur from the gestation. At birth, highlight the moment of breastfeeding importance to strengthen the bond between mother and child, as well as for the construction and child's language development in the first years of life;

Orofacial motricity (development of orofacial structures): The act of sucking favors the growth and adequate development of stomatognathic system structures (cheeks, tongue, jaw, lips and dental arch);

Oral functions: Breastfeeding is important for the development of oral functions: chewing, sucking, swallowing, speaking, and breathing.

Nasal breathing: The lip seal made during breastfeeding promotes the development of nasal breathing, fundamental for the harmonious growth of orofacial structures ⁽¹⁹⁾.

Use of artificial nipples (pacifier and bottle): NBs who are breastfed in MB do not need to use dummies and / or artificial nipples. Bottles are carefully prescribed (orthodontic nipples, silicone material and size compatible for each age group), when breastfeeding is not possible, or is contraindicated;

Hearing: Clarify about prevention of otitis by keeping the NB head elevated relative to the body during breastfeeding. Auditory stimulation, through conversation, songs and stories;

Specific doubts about the: Registration of subjects / aspects addressed with the mother, which have not been contemplated elsewhere in the protocol.

Conduct

Return to:

First evaluation, because: Usually occurs from medical request, or from the interdisciplinary team (describe the reason);

New evaluation, because: When there is a need to reassess the aspects that were not possible to be observed at the first visit (describe the reason);

Follow-up, because: When the dyad presents behaviors indicative of difficulty, or to verify the orientations effectiveness carried out in the first moment (always to emphasize the reason). Follow-up follow-up is recommended between 18 and 24 hours after the first evaluation (interval considered relevant for interventions to have an effect);

Others: Note some aspect that has been observed / evaluated and is not located elsewhere in the protocol.

Do not return, then:

Orientation occurred in an effective way: Breastfeeding is established. The evaluated aspects are adequate and the mother is oriented on the benefits of BF;

Not available for guidance: Mother and / or NB are absent from the bed, at the time of the visit (in clinical procedure, mother feeding time, among others). It may happen that the mother has already breastfed the NB immediate moments before the health professional visit;

Exhausted the possibilities of orientation: When there is hospital discharge and / or when there is (medical) contraindication to the MB offer.

Follow-up of the case: VISIT n°

Space destined to control the interventions, where the date and time of visits are recorded, by the health professional, the professionals name and any trainees involved in the intervention. The legend shows that the records involve the observation of breastfeeding before direct intervention with the dyad (indicating the square) and soon after the intervention (indicating the circle), and each visit is contemplated with registration in different colors. If it is difficult to indicate, in the same item, four different visits, the professional can choose to open a instrument new sheet, to better visualize the record of his intervention.

DISCUSSION

The protocol content analysis allowed the inclusion and reformulation of items, which are still evident, discussing the aspects that were altered. The points covered in the instructional were established from the practice and bibliographical reference, being considered of great importance so that the professional can use the protocol in a full and consistent way, in the evaluation and monitoring of the BF situation.

Regarding identification data and clinical history, there was inclusion of schooling to complement the mothers profile

characterization, as well as the items related to the clinical status of NB as Apgar, birth weight, respiratory interurrences and malformations.

Schooling is considered important to understand the sociodemographic context in which the puerperal woman is inserted and to adapt the language used in the intervention⁽²⁰⁾. Studies^(20,21) emphasized that the highest maternal education level is a good predictor of the success of exclusive breastfeeding, since mothers with little schooling introduce their children's diet early in the diet, leading to early weaning.

The collection of gestational antecedents, such as vices, maternal diseases and the accomplishment of breast surgeries are fundamental to justify possible problems that may interfere with the success of exclusive breastfeeding (EB)⁽²⁰⁾.

The items that addressed the availability and conditions for BF were reduced, becoming more objective, since, although the majority of those who referred to the conditions for breastfeeding had a concordance greater than 70%, it was evidenced by the evaluators, the fact that they involve subjective professional interpretation.

Regarding the mothers breasts condition, the only item that obtained lower concordance than the established one was "adequate", being, then, reformulated, according to the judges' considerations. The term "suitable" was replaced by "healthy", and the breasts were considered healthy when they did not have anomalies that interfere with the pathophysiology of lactation and / or nipple traumas that obstruct correct handling by NB⁽²²⁾.

Regarding the conditions of puerperal nipples, some items were reformulated and others excluded, using the CVI presented. The term "evertido" was reformulated to "inverted", following the precepts of updating the nomenclature in the area⁽²³⁾.

The term "nipple" was added next to the nipple "beak", since the nipple is located at the height of the areola, with cylindrical, pigmented form, of varied size, forming part of the areolopapillary complex (composed of two structures: areola and papilla), which better encompasses the aspect being proposed⁽²³⁾.

Regarding NB's readiness to breastfeed, only "pursuit movement" had to be replaced by "pursuit reflex". Reflexes are considered to be present in NBs during breastfeeding, although they may be weak or absent in those who have presented a variety of events, such as prematurity, low birth weight, or pathologies⁽²⁴⁾.

Regarding the suckling situation observation, the items on positioning, handling, sucking pattern and bonding obtained satisfactory indexes. There was only the insertion of an item: "orientation regarding the time / duration of the feeding", agreeing with the literature that refers to duration as a parameter of feeding effectiveness⁽²⁴⁾.

In relation to the general interventions / guidelines, the experts considered the subjects covered sufficient. All items had levels of agreement and CVI higher than acceptable as appropriate. With regard to speech and language measures, the level of agreement and the CVI were higher than the established as acceptable. However, in order to better organization and dissemination of speech therapy-related content, suggestions of experts were accepted, some reformulated items, with the inclusion of content in orofacial motricity (development of orofacial structures), oral functions (sucking, chewing, swallowing and speaking) and nasal breathing aspects.

The topic related to the content conducts and records of the obtained a good level of agreement and CVI, above that established. However, the terms "speech therapist" and "trainee" were presented in the masculine, seeking to generalize

information for both sexes, since the grammatical gender does not refer to biological sex.

The present study, however, was based on the speech-language pathology protocol analysis for a low-risk neonatal population, which may be a limitation to the applicability in the observation of breastfeeding of newborns at risk.

In short, in the content analysis and protocol appearance, there were 15 items added, seven modified, five excluded, and one added topic. A high level of agreement was obtained, with the answers distributed in the "agree" and "fully agree" options (92% in relation to content and 100% in appearance). It should also be noted that the instructional guide was developed, which aims to guide the applicability of this instrument.

CONCLUSION

The content analysis and appearance of the Speech-Language Pathology-Breastfeeding Monitoring Protocol, as well as the instructional guide preparation, were carried out in a satisfactory manner, and are intended to enable the understanding of its use in the speech-language field related to breastfeeding, addressing both the assessment, as well as the mother / newborn dyad monitoring in the breastfeeding situation.

The study later stages should have professionals with different experiences from those presented by the current evaluators. It is considered the performing of instrument applicability in clinical practice, as the next and important step for the validation process of the instrument.

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Annex 1. Original protocol extracted from Pivante and Medeiros⁽⁶⁾

ACOMPANHAMENTO FONOAUDIOLÓGICO – ALEITAMENTO MATERNO

Quarto: _____ Leito: _____

1. Dados de Identificação e Histórico Clínico:

Nome Mãe: _____ Idade: _____ Profissão: _____ IG.: _____ N° Gest: _____ Paridade: _____
 Pré-natal não sim: N° consultas_Participou de curso para gestantes não sim? Local: _____
 Recebeu orientações sobre aleitamento? _____
 Já amamentou? não sim: Até qual idade? _____? Por quê? _____
 Nome do RN: _____ Sexo: M F Data nasc: ____/____/200__ * Horário: ____:____ hs. * Parto: normal cesárea
 Descrição de características cranio-faciais cervicais: _____
 Obs.: _____

2. Dados de observação da mãe

Disponibilidade e condições para o aleitamento

- motivada desmotivada
- tranqüila insegura
- aberta à orientação indiferente
- bem estar geral com dor
- solicitou auxílio não pretende amamentar

Condições das mamas

- adequadas doloridas
- ingurgitadas febris

2.3 – Condições dos bicos

- adequado plano
- muito saliente pouco saliente
- evertido processo de rachadura

2.4 Características do leite

- colostro ejeção de leite sem descida do leite

3. Dados de observação do recém-nascido

3.1- Estado comportamental

- Sono Profundo Alerta
- Sono Leve Agitado/Irritado
- Sonolento Choro

3.2- Prontidão para a mamada

- Mov. Procura Mov. sucção Preensão palmar
- Leva mãos à linha média Leva mãos à face

4. Observação da situação de aleitamento

4.1- Posicionamento

- sentada deitada em pé
- relaxada tensa
- contato corporal (barriga com barriga)
- cabeça do RN elevada em relação ao corpo
- cabeça do RN alinhada em relação ao corpo

4.2 Pega

- pega efetiva não consegue manter a pega
- abocanha parte da aréola abocanha somente bico

4.3 Padrão de Sucção

- sucção eficaz sucção lenta
- suga e logo adormece não suga
- coordenação de movimentos incoordenação/engasgos

4.4 Vínculo Mãe- Bebê

- mantém contato de olho sorri
- toques/carinho/ contato corporal conversa

5. Intervenções Gerais

- houve necessidade de acordar o RN
- não se onsegiu acordar o RN
- auxílio no posicionamento da mãe
- auxílio no posicionamento do RN
- auxílio na adequação da pega
- manobras para formação/adequação do bico
- manobras para descida do leite
- orientação quanto à troca de mamas
- orientação quanto à prevenção de rachaduras
- orientação quanto ao posicionamento do RN
- orientação quanto ao posicionamento da mãe

6. Intervenções Fonoaudiológicas

- linguagem (desenvolvimento e importância do vínculo)
- fala (desenvolvimento de O.F.A.e motricidade oral)
- critérios para o uso de bicos artificiais
- audição (prevenção de otite/ estimulação auditiva)

Foram sanadas dúvidas específicas quanto à: _____

7. 1. Conduta - Retornar para:

- primeira avaliação, pois _____
- nova avaliação, pois _____
- acompanhamento, pois, _____
- outros: _____

7.2. Conduta - Não retornar, pois:

- orientação deu-se de forma efetiva
- não disponível para orientações
- esgotadas as possibilidades de orientações

8. Acompanhamento do Caso: VISITA n° ◆ ◆ ◆ ◆ ◆

1ª visita: Data: / / Horário: Fga.:
Estagiária(s):
Obs.:
2ª visita: Data: / / Horário: Fga.:
Estagiária(s):
Obs.:
3ª visita: Data: / / Horário: Fga.:
Estagiária(s):
Obs.:
Legenda: <input type="checkbox"/> observações iniciais <input type="checkbox"/> observações após orientações
1ª visita: azul / 2ª visita: vermelho / 3ª visita: verde / 4ª visita: preto

Annex 2. Version reviewed and updated by the authors Medeiros, Nascimento and Santos (2017)

PROTOCOLO DE ACOMPANHAMENTO FONOAUDIOLÓGICO - ALEITAMENTO MATERNO

1. Dados de Identificação e Histórico Clínico

Quarto: _____ Leito: _____

Nome Mãe: _____ Idade: _____ Profissão: _____ Escolaridade: _____

Pré-natal: não sim Nº consultas _____ Nº Gest.: _____ Paridade: _____ Vício(s) no período gestacional: tabagismo etilismo drogas

Doenças maternas: diabetes hipertensão outras _____ Cirurgia mamária não sim Qual? _____

Recebeu orientações sobre aleitamento? não sim Participou de curso para gestantes? não sim Local: _____

Já amamentou filhos anteriores? não sim: Até qual idade? _____ Por quê? _____

Amamentou na 1ª hora de vida? não sim Pretende amamentar? não sim Por quê? _____

Nome RN: _____ Sexo: M F Data do nasc: ____/____/20____ Horário: ____:____ hs. Parto normal cesárea

IG: _____ Peso ao nascer: _____ Apgar: 1º min.: ____ 5º min.: ____ Intercorrências respiratórias? não sim Má formações? não sim

Descrição de características craniofaciais cervicais: _____

Obs.: _____

2. Dados de Observação da Mãe

2.1. Disponibilidade e Condições para o Aleitamento

- atenta às orientações/explicações
- indiferente às orientações/explicações
- bem estar geral/saudável com dor
- solicitou auxílio

2.2. Condições das Mamas

- saudáveis doloridas
- ingurgitadas febris

2.3 – Condições dos Bicos (mamilos)

- favorável plano
- protruso invertido
- processo de rachadura

2.4. Características do Leite

- colostro ejeção de leite sem descida do leite

3. Dados de Observação do Recém-Nascido

3.1- Estado Comportamental

- sono profundo sonolento sono leve
- alerta irritado choro

3.2- Prontidão para a Mamada

- reflexo de procura mov. sucção preensão palmar
- leva mãos à linha média leva as mãos à face

4- Observação da Situação de Aleitamento

Horário Inicial: _____ Horário Final: _____ Duração: _____

4.1. Posicionamento Mãe-Recém-Nascido

- sentada deitada em pé
- relaxada tensa
- contato corporal (barriga com barriga)
- cabeça do RN elevada em relação ao corpo
- cabeça do RN alinhada em relação ao corpo

4.2. Pega do RN

- pega efetiva não consegue manter a pega
- abocanha parte da aréola abocanha somente bico(mamilo)

4.3. Padrão de Sucção

- sucção eficaz sucção com pausas longas
- suga e logo adormece não suga
- movimentos coordenados de mandíbula

4.4. Sucção/Deglutição/Respiração (S/D/R)

- coordenação S/D/R incoordenação S/D/R engasgos
- Possível causa: _____

4.5. Vínculo Mãe-Recém-Nascido

- mantém contato de olho sorri
- toques/carinho/contato corporal conversa

5. Intervenções Gerais

- houve necessidade de acordar o RN
- não se conseguiu acordar o RN
- auxílio no posicionamento da mãe
- auxílio no posicionamento do RN
- auxílio na adequação da pega
- manobras para formação/adequação do bico (mamilo)
- manobras para descida do leite
- orientação quanto à troca de mamas
- orientação quanto ao tempo/duração da mamada
- orientação quanto à prevenção de rachaduras
- orientação quanto ao posicionamento do RN
- orientação quanto ao posicionamento da mãe

6. Intervenções Fonoaudiológicas

- Linguagem (desenvolvimento e importância do vínculo)
- Motricidade Orofacial (desenvolvimento das estruturas orofaciais)
- Funções Orais (sucção, mastigação, deglutição e fala)
- Respiração Nasal
- Audição (prevenção de otite/estimulação auditiva)
- Critérios para o uso de bicos artificiais
- Foram sanadas dúvidas específicas quanto à: _____

7. Conduta

7.1- Retornar para:

- primeira avaliação, pois: _____
- nova avaliação, pois: _____
- acompanhamento, pois: _____
- outros: _____

7.2- Conduta - Não retornar, pois:

- orientação deu-se de forma efetiva
- não disponível para orientações no momento
- esgotadas as possibilidades de orientações

8. Acompanhamento do Caso: VISITA nº

1ª visita: Data: ____/____/____ Horário: ____ Fgo.: _____
Estagiário(s): _____
Obs.: _____
2ª visita: Data: ____/____/____ Horário: ____ Fgo.: _____
Estagiário(s): _____
Obs.: _____
3ª visita: Data: ____/____/____ Horário: ____ Fgo.: _____
Estagiário(s): _____
Obs.: _____
4ª visita: Data: ____/____/____ Horário: ____ Fgo.: _____
Estagiário(s): _____
Obs.: _____
Legenda: <input type="checkbox"/> observações iniciais <input type="checkbox"/> observações após orientações Marcação (em cores) 1ª visita: azul / 2ª visita: vermelho / 3ª visita: verde / 4ª visita: preto