





Rev. Enferm. UFSM, v.12, e31, p.1-19, 2022 • https://doi.org/10.5902/2179769268259 Submission: 10/25/2021 • Acceptance: 3/17/2022 • Publication: 7/26/2022

Original article

Clinical applicability of Nursing interventions from a given terminology for the assistance provided in the breastfeeding process

Aplicabilidade clínica das intervenções de enfermagem de uma terminologia para assistência no processo de amamentação

Aplicabilidad clínica de las intervenciones de Enfermería de una terminología para la asistencia provista en el proceso de lactancia materna

Odette Moura dos Santos¹, Fernanda Broering Gomes Torres¹, Denilsen Carvalho Gomes¹, Cândida Caniçali Primo¹, Marcia Regina Cubas¹

¹ Universidade Católica do Paraná. Curitiba, Paraná, Brazil ¹ Universidade Federal do Espírito Santo. Vitória, Espírito Santo, Brazil

Abstract

Objective: to analyze clinical applicability of the Nursing interventions from the terminology subset of the International Classification for Nursing Practice (ICNP®) for the assistance provided to women and children in the breastfeeding process. **Method:** a cross-sectional study. The data were collected through systematic and non-participant observation during the care provided to the puerperal women in a maternity hospital. The study participants were puerperal women and their newborns, as well as nurses and nursing technicians. An instrument with all 213 interventions from the subset was used. **Results:** in 15 observations, 24 interventions were prescribed and observed, such as examining the mother's breasts; 77 were not prescribed but observed, such as stimulating breastfeeding on demand; and 112 were not observed or prescribed, such as reinforcing the advantages of breastfeeding. **Conclusion:** the interventions from the ICNP® subset can be applied in Rooming-In care. A deficit was identified in the prescription and evaluation of the Nursing interventions.

Descriptors: Rooming-in Care; Breastfeeding; Serial Cross-Sectional Studies; Standardized Nursing Terminology; Nursing Process

Resumo

Objetivo: analisar a aplicabilidade clínica das intervenções de enfermagem do subconjunto terminológico da Classificação Internacional para a Prática de Enfermagem (CIPE®) para assistência à mulher e à criança em processo de amamentação. **Método:** estudo transversal. Dados coletados pela observação, sistemática e não participativa, durante os cuidados às puérperas em uma maternidade. Participaram puérperas e seus recém-nascidos; enfermeiras e técnicos em enfermagem. Utilizado instrumento com as 213 intervenções do subconjunto. **Resultados:**



em 15 observações, 24 intervenções foram prescritas e observadas, como examinar as mamas da mãe; 77 não prescritas e observadas, como estimular amamentação em livre demanda; e 112 não foram observadas e nem prescritas, como reforçar as vantagens da amamentação. **Conclusão:** as intervenções do subconjunto da CIPE® são aplicáveis em alojamento conjunto. Identificou-se deficiência na prescrição e avaliação das intervenções de enfermagem.

Descritores: Alojamento Conjunto; Amamentação; Estudos Transversais; Terminologia Padronizada em Enfermagem; Processo de Enfermagem

Resumen

Objetivo: analizar la aplicabilidad clínica de las intervenciones de Enfermería del subconjunto terminológico de la Clasificación Internacional para la Práctica de Enfermería (CIPE®) correspondiente a la asistencia provista a mujeres y niños en el proceso de lactancia materna. Método: estudio transversal. Los datos se recolectaron por medio de observación sistemática y no participativa, durante la atención proporcionada a mujeres puérperas en una maternidad. Participaron las puérperas y sus recién nacidos, enfermeras y técnicos de Enfermería. Se utilizó un instrumento con las 213 intervenciones del subconjunto. Resultados: en 15 observaciones, se prescribió y observó un total de 24 intervenciones, como ser examinar los senos de la madre; 77 no fueron prescriptas pero sí observadas, como ser estimular la lactancia de libre demanda; y 112 no se prescribieron ni observaron, como ser reforzar las ventajas de la lactancia materna. Conclusión: las intervenciones del subconjunto de la CIPE® pueden aplicarse en el área de Alojamiento Conjunto. Se identificó cierta deficiencia en la prescripción y evaluación de las intervenciones de Enfermería.

Descriptores: Alojamiento Conjunto; Lactancia Materna; Estudios Transversales Seriados; Terminología Normalizada de Enfermería; Proceso de Enfermería

Introduction

The International Classification for Nursing Practice (ICNP®) is a terminology that gathers concepts to represent the Nursing practice elements: diagnoses, outcomes and interventions. When grouped, these elements constitute a terminology subset directed to health priorities (health conditions, clinical care specialties, Nursing phenomena) and/or to specific clienteles (individual, family and community). The subsets support the systematic documentation of care, stimulate research and promote the formulation of health policies that qualify the professional practice. 3-4

Given the nurses' role in the breastfeeding phenomenon and the relevance of recording this care for visibility of the profession,⁵⁻⁷ the use of standardized language based on theoretical frameworks is fundamental to represent the impact of the assistance provided. In this sense, an ICNP® terminology subset was developed to assist women and children in the breastfeeding process, based on the Interactive Theory of Breastfeeding.3 Given the importance of initiating breastfeeding from the first minutes

of the infant's life, this theory can be useful in the care practice for assisting nurses from the area in achieving the knowledge, critical thinking and skills necessary for making decisions that include protection, promotion and support for breastfeeding in a safe and competent way.5

To identify whether the Nursing interventions from a terminology subset are representative of and relevant to the clinical practice, it is necessary to analyze their applicability. This allows identifying assistance-related gaps and difficulties in systematized recording that can influence a number of practice, teaching and research aspects. In addition to this, the applicability analysis can contribute to the standardization of Nursing planning and implementation for safe and quality care.^{2,8}

In this context, the following research question was formulated: Do the Nursing interventions from the "ICNP® terminology subset for the assistance provided to women and children in the breastfeeding process" represent the practice performed by the Nursing team in Rooming-In care? The objective of the research that generated this article was to analyze clinical applicability of the Nursing interventions from the ICNP® terminology subset for the assistance provided to women and children in the breastfeeding process.

Method

This is a cross-sectional and descriptive study with a quantitative approach, by the STrengthening the Reporting of OBservational studies in Epidemiology (STROBE) strategy for writing quality and transparency. The data were collected in a 62-bed maternity hospital, belonging to a University Hospital in the Brazilian South region, which performs a mean of 240 procedures/month, among normal and surgical deliveries and other obstetric care. The institution adopts the Rooming-In system and, up to the collection time, was not part of the Baby-Friendly Initiative.

The research participants were 38 individuals, distributed in two groups. Group one: comprised by fifteen puerperal women aged over 18 years old and their newborns, hospitalized in the Rooming-In area between 48h and 72h postpartum, randomly selected by their hospitalization condition. Group two: comprised by six nurses and 17 nursing technicians from the maternity hospital.

Group one included puerperal women that underwent normal o C-section deliveries and with single or twin live births. Postpartum women with one or more of the following situations were excluded: history of psychiatric disease or use of illicit substances; presence of contagious infectious disease during hospitalization; hospitalized or referred to the Intensive Care Unit (ICU) during hospitalization; and/or newborn hospitalized in the neonatal ICU or prevented from breastfeeding (due to malformation or other diseases). In group two, 100% of the professionals who worked during the daytime period were included, and those who were on vacation and/or leave for any reason during the data collection period were excluded.

Formal consent to participate in the research was requested in both groups. There were no refusals or withdrawals in any of the groups approached. Data collection was conducted between April and June 2017, in two stages. In the first stage, the Nursing interventions were identified by the main researcher in the patient's electronic medical chart and recorded in a specific instrument, organized according to the Interactive Theory of Breastfeeding5 and to the Rooming-In context. To avoid collection bias, the content recorded was checked by the clinical nurse on duty immediately after identification.

In the second stage, the data were collected through systematic and non-participatory observation of the care provided by the Nursing team member to the mother/child binomial. For systematic non-participatory observation, a structured instrument was used containing all 213 Nursing interventions resulting from the 74 Nursing diagnoses of the "ICNP® terminology subset for the assistance provided to women and children in the breastfeeding process". The observation took place between 48h and 72h after delivery and the mean duration of the individualized observation of the care provided was two hours, totaling 30 hours in 15 observations.

The interventions were categorized according to the eleven concepts of the Interactive Theory of Breastfeeding, namely: mother-child dynamic interaction; woman's perception about breastfeeding; child's perception about breastfeeding; woman's biological conditions; child's biological conditions; woman's body image; mother's role, organizational systems for protection, promotion and support of breastfeeding; family and social authority; woman's decision making; and space for breastfeeding.^{3,5}

Execution of the care actions was observed by the main researcher, without interfering during the process. To avoid collection bias, the observation recorded was checked by the Nursing professional involved in the care provided immediately after recording.

The records were transferred to a *Microsoft Office Excel*® spreadsheet. The data were organized into "prescribed and observed", "not prescribed but observed" and "not prescribed or observed" interventions and represented by absolute and relative frequencies according to the concepts of the theory. Subsequently, the total number of interventions from the terminology subset was compared to those observed. The results were discussed under the light of the literature on the topic.

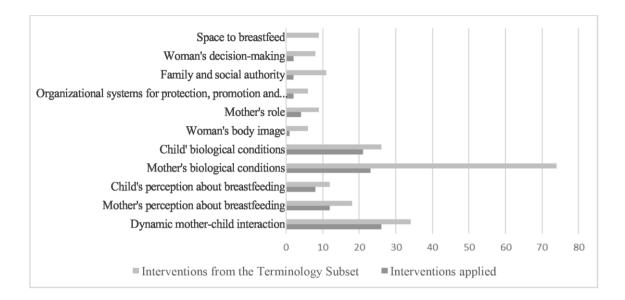
The research was approved by the Research Ethics Committee of the Pontifical Catholic University of Paraná, Under Opinion No. 4,746,479, meeting the premises set forth in Resolution No. 466/2012 of the National Health Council.

Results

In the observations of the care provided to the 15 mother-child binomials, 24 prescribed and observed interventions were identified, as well as 77 not prescribed but observed and 112 not prescribed or observed. The comparison between the Nursing interventions observed and all 213 interventions from the terminology subset, according to the concepts of the Interactive Theory of Breastfeeding, is presented in Graph 1.

Graph 1 – Comparison between the Nursing interventions observed and the totality of interventions from the terminology subset, according to the Interactive Theory of Breastfeeding concepts (N=213). Curitiba, PR, 2021.





Of the 24 "prescribed and observed" Nursing interventions (Tables 1, 2 and 3), the following four (4) were identified in all the care instances: examining the mother's breasts; teaching about the importance of offering alternating breasts in consecutive nursing sessions; teaching how to attach and remove the newborn to breastfeed; and teaching about water intake. The concepts of the theory not addressed in the Nursing prescriptions were the following: family and social authority; space for breastfeeding; woman's body image; mother's role; child's perception about breastfeeding; woman's perception about breastfeeding; organizational systems for the protection, promotion and support of breastfeeding; and woman's decision-making.

Of the 77 "not prescribed but observed" Nursing interventions, didactically presented in three tables (Tables 1, 2 and 3), eight were identified in all the care instances: stimulating breastfeeding in the first half hour after birth; encouraging ondemand breastfeeding; encouraging the mother to breastfeed frequently; reinforcing the importance of fully emptying the breasts; reinforcing to the mother the importance of correct latching by the newborn; developing educational activities about breastfeeding; referring the parents to classes or support groups about breastfeeding; and offering written material about breastfeeding.

In the woman's body image concept, only the "encouraging the mother to talk about her feelings" intervention was observed (in only one observation), although it was not prescribed. No Nursing interventions were observed for the "space for breastfeeding" concept of the theory.

Table 1 presents prescribed and observed and not prescribed but observed Nursing interventions from the "dynamic mother-child interaction" concept; as well as not prescribed or observed Nursing interventions from the "woman's perception about breastfeeding" concept.

Table 1 - Absolute and relative frequencies of the prescribed and observed (N=24) and not prescribed but observed (N=77) Nursing interventions, according to the Interactive Theory of Breastfeeding concepts (N=101). Curitiba, PR, 2021.

Concept of the Theory	N (%)
Category	
Nursing Interventions	
Dynamic mother-child interaction	
Prescribed and observed	
Evaluating the mother-child position during breastfeeding	11(73)
Evaluating breast emptying	9(60)
Evaluating the suction reflex of the newborn	11(73)
Encouraging the mother to massage the breasts before breastfeeding	11(73)
Examining the mother's breasts*	15(100)
Teaching about the importance of offering alternating breast in consecutive nurs sessions*	ing 15(100)
Teaching how to remove the newborn from the breast*	15(100)
Teaching about beginning the next nursing session starting with the breast used the last session	d in 12(80)
Not prescribed but observed	
Evaluating the mother-child interaction	10(67)
Evaluating breastfeeding	12(80)
Showing the mother different positions to breastfeed	7(47)
Demonstrating how to massage the breasts	8(53)
Encouraging exclusive breastfeeding until the baby is six months old	9(60)
Encouraging on-demand breastfeeding*	15(100)
Encouraging breastfeeding in the first hour after birth*	15(100)
Stimulating the milk ejection reflex before beginning breastfeeding	9(60)
Massaging areolas before breastfeeding	6(40)
Teaching the mother to open the newborn's mouth wide before breastfeeding	11(73)
Teaching about the benefits of breastfeeding	5(33)
Reinforcing the importance of breast attachment and correct position of newborn to the mother	the 12(80)
Reinforcing breast exchange in alternating nursing sessions	11(73)
Reinforcing care with breasts and nipples	14(93)
Reinforcing the different positions for breastfeeding	7(47)
Reinforcing the correct technique to breastfeed	13(87)
Supervising the mother-newborn positions during breastfeeding	8(53)
Supervising the suction reflex of the newborn	12(80)
Woman's perception about breastfeeding	

Not prescribed but observed	
Evaluating the expectations about breastfeeding	10(67)
Evaluating the perception about breastfeeding	10(67)
Evaluating the capacity to breastfeed	12(80)
Evaluating knowledge about breastfeeding	10(67)
Showing the mother different positions to breastfeed	7(47)
Developing educational activities about breastfeeding*	15(100)
Referring the parents classes or support groups about breastfeeding*	15(100)

Offering written material about breastfeeding* 15(100) Reinforcing the guidelines about breastfeeding 8(53)

9(60)

Identifying difficulties in breastfeeding capacity

Table 2 presents not prescribed but observed Nursing interventions of the "child's perception about breastfeeding" concept; as well as prescribed and observed and not prescribed or observed Nursing interventions of the "woman's biological condition" concept.

Table 2 - Absolute and relative frequencies of the prescribed and observed (N=24) and not prescribed but observed (N=77) Nursing interventions, according to the Interactive Theory of Breastfeeding Theory concepts (N=101). Curitiba, PR, 2021.

Concept of the Theory Category	N (%)
Nursing Interventions	
Child's perception about breastfeeding	
Not prescribed but observed	
Evaluating the newborn's behavior during breastfeeding	12(80)
Evaluating the newborn's incapacity to attach to the areola-nipple region	9(60)
Evaluating the newborn's position during breastfeeding	11(73)
Evaluating the newborn's reflexes during breastfeeding	11(73)
Evaluating whether the newborn's mouth is in the correct position	13(87)
Evaluating whether the newborn cries when placed near the breasts	13(87)
Evaluating whether the newborn is calm during breastfeeding	12(80)
Reinforcing the importance of the mother to be calm during breastfeeding	9(60)
Woman's biological conditions	
Prescribed and observed	
Spreading human milk on the nipples after breastfeeding	9(60)
Evaluating lactation	9(60)
Evaluating the mother's breasts and nipples daily	9(60)
Evaluating breast emptying	7(47)
Evaluating skin integrity	10(67)
Evaluating the suction reflex of the newborn	12(80)

Supervising the mother's capacity to breastfeed 10(67) Supervising the mother's capacity to massage the breasts 9(60)

^{*}Interventions applied in all the observations.

Encouraging the mother to massage the breasts before breastfeeding	10(67)	
Encouraging the mother to fully empty the breasts	10(67)	
Examining characteristics of the nipple fissure	12(80)	
Teaching about the possible causes of pain	11(73)	
Teaching about water intake*		
Not prescribed but observed		
Showing the mother how to massage the breasts	6(40)	
Encouraging the mother to offer the affected breast to the newborn	9(60)	
Encouraging the mother to perform massage and milking	6(40)	
Encouraging the mother to breastfeed frequently*	15(100)	
Massaging the breasts whenever necessary	12(80)	
Teaching about the importance of correct attachment of the child during	9(60)	
breastfeeding	, ,	
Teaching about the importance of offering alternating breasts in alternating nursing sessions	13(87)	
Teaching the mother to open the newborn's mouth wide before breastfeeding	11(73)	
Teaching the mother about the importance to exchanging breasts	13(87)	
Reinforcing the importance of fully emptying the breasts*	15(100)	
Reinforcing to the mother the importance of correct attachment by the newborn*	15(100)	
Supervising the suction reflex of the newborn	10(67)	

^{*}Interventions applied in all the observations.

Table 3 presents prescribed and observed and not prescribed but observed Nursing interventions from the "child's biological conditions" concept; as well as not prescribed but observed nursing interventions from the "mother's role", "organizational systems for the promotion and support of breastfeeding"; "family and social authority", and "woman's decision-making" concepts.

Table 3 – Absolute and relative frequencies of prescribed and observed (N=24) and not prescribed but observed (N=77) Nursing interventions, according to the Interactive Theory of Breastfeeding concepts (N=101), Curitiba, PR. 2021.

Concept of the Theory	N (%)
Category	
Nursing Interventions	

Child's biological conditions

Prescribed and observed

Evaluating breast emptying	12(80)		
Evaluating the suction reflex of the newborn	12(80)		
Teaching the mother to monitor the newborn's suction	11(73)		
Teaching about the appropriate technique to interrupt the newborn's suction			
Supervising the suction reflex of the newborn			
Not prescribed but observed	11(73)		
Evaluating breastfeeding	13(87)		
Evaluating mother-child position during breastfeeding	14(93)		
Evaluating the breasts and nipples after breastfeeding	9(60)		
Evaluating the newborn's psychomotor development	13(87)		
Evaluating the newborn's swallowing pattern	13(87)		
Evaluating the newborn's sucking reflex	12(80)		
Evaluating the newborn's rooting reflex	14(93)		
Stimulating suction in the newborn	12(80)		
Explaining mother-child positions for breastfeeding	12(80)		
Massaging the newborn's softly to stimulate the suction reflex	14(93)		
Monitoring the newborn's suction capacity	14(93)		
Monitoring the newborn's weight	14(93)		
Monitoring the newborn's suction reflex	14(93)		
Watching the newborn close to the breast to determine correct position, audible	12(80)		
swallowing and the suction/swallowing pattern	-()		
Teaching the mother to open the newborn's mouth wide before breastfeeding	10(67)		
Supervising the mother-newborn positions during breastfeeding	11(73)		
Mother's role	` ,		
Not prescribed but observed			
Evaluating the interaction between mother and newborn	12(80)		
Showing the care procedures to be applied to the newborn	12(80)		
Encouraging the mother to perform care procedures with the newborn	12(80)		
Encouraging the mother to talk to and touch the newborn during breastfeeding	11(73)		
Organizational systems for the protection, promotion and support of breastfeeding			
Not prescribed but observed			
Supporting the mother to breastfeed	11(73)		
Developing educational actions to encourage breastfeeding	14(93)		
Family and social authority			
Not prescribed but observed			
Encouraging the family to support the mother to breastfeed	8(53)		
Explaining the importance of breastfeeding	4(27)		
Woman's decision-making			
Not prescribed but observed			
Encouraging the mother to make decisions about her care and the newborn's	6(40)		
Encouraging the mother's self-confidence	8(53)		

^{*}Interventions applied in all the observations.

Chart 1 relates all the Nursing interventions from the terminology subset that were not prescribed or observed.

Chart 1 – Nursing interventions not prescribed or observed, according to the Interactive Theory of Breastfeeding concepts. Curitiba, PR, 2021.

	streeding concepts. Curitiba, PR, 2021.
Concept of the	Nursing interventions not prescribed or observed
Theory Dynamic mother-child interaction	Evaluating the mother during execution of manual milking; demonstrating the manual breast milking technique; teaching the mother to hold a large breast during breastfeeding; teaching about the importance of frequent use of a "double strap" bra to support the breasts and keep them tight; executing manual milking whenever necessary; reinforcing the advantages of breastfeeding; supervising the mother while she executes manual breast milking; supervising the mother while she executes the breast massage.
Woman's perception about breastfeeding	Demonstrating the manual breast milking technique; identifying cultural practices that may negatively/positively influence breastfeeding; identifying emotions that may negatively influence breastfeeding; teaching about human milk storage; reinforcing the positive cultural practices related to breastfeeding; supervising the mother's capacity to milk the breasts.
Child's perception about breastfeeding	Evaluating whether the newborn arches the body during breastfeeding; identifying anomalies in the newborn; identifying signs of irritability in the newborn; supervising the newborn's behavior during breastfeeding
Woman's biological conditions	Guiding the mother to enroll as a milk donor in case of breasts full of milk; administering prescribed medications; applying a cold compress under the supervision of a healthcare professional; apply a hot compress under the supervision of a healthcare professional; encouraging the mother to massage the breasts; evaluating the place where the surgical drainage was inserted; evaluating type and place of breast engorgement; evaluating pain after administration of medications; evaluating signs and symptoms of breast infection; encouraging the mother not to interrupt breastfeeding; encouraging exclusive breastfeeding until the baby is six months old; encouraging frequent rest periods for the mother; teaching the mother how to milk; teaching non-pharmacological methods for pain relief; encouraging the mother to expose the nipples to the sun; encouraging breastfeeding with the affected breast; examining the newborn's oropharynx; determining severity of the breast infection; determining severity of breast engorgement; executing the milk supplementation technique through a urethral catheter during breastfeeding (translactation); executing the milk supplementation technique by sticking a urethral catheter to a finger and introducing them in the newborn's mouth (finger feeding); informing the mother about the importance of avoiding the use of alcohol during lactation; informing the mother of the importance of avoiding the use of alcohol during lactation; informing the mother about the importance of not interrupting breastfeeding; informing the mother about the importance of malk production and their use; interrupting breastfeeding if there is an abscess in the areolar region or if the baby regurgitates pus; cleaning the newborn's mouth after breastfeeding; teaching the mother to perform milking and massage; teaching the mother about the importance of donating milk; teaching about the milk supplementation technique through a urethral catheter during breastfeeding (translactation); teaching about the milk supplementation te

 encouraging factors for the decision to breastfeed; identifying the factors that
influence the decision to breastfeed; identifying the cultural issues that interfere in
the decision to breastfeed; listening to the mother carefully and supporting her.

Nursing interventions that were not prescribed or observed were identified in all the Interactive Theory of Breastfeeding concepts.³

Discussion

Most of the interventions observed focused on the "dynamic mother-child interaction" concept, although those from the "women's biological conditions" concept are the most abundant in the subset. Observation of the implementation of interventions to encourage breastfeeding in the first half hour of life ("golden hour") and the breast exam denotes that such care measures begin immediately after birth, with emphasis on the actions by Nursing team. By implementing such interventions, the newborn will better adapt to extrauterine life, from physiological aspects such as reduction of hypothermia¹⁰ to emotional aspects, such as the establishment of affective bonds between the mother-child binomial.¹¹

In addition to such interventions there are those aimed at encouraging skin-toskin contact and on-demand exclusive breastfeeding, in which participation of the health professional is essential. 10,12-13 In the Theory, breastfeeding consists of an interaction process between mother and child, who also interact with the environment, in order to achieve the benefits of breast milk;5 thus, it has positive and negative dimensions, which requires professional assistance to the woman in the initial phase of breastfeeding. 5,14

The on-demand scheme should be encouraged so that the child can satisfy their needs for as long as necessary. 11,13 Unfortunately, both nurses and puerperal women do not always adhere to this practice, limiting duration of breastfeeding. 15

The importance of prescribing interventions that indirectly support the motherchild interaction is highlighted, including guidance, demonstration and evaluation of positioning for breastfeeding; areola massage and stimulation of the milk ejection reflex before breastfeeding. 13,16 Latching and positioning are factors that interfere with the correct breastfeeding technique and with breastfeeding success, as they are related to nipple traumas¹⁷⁻¹⁸ that hinder initiating the breastfeeding process or even cause it to be interrupted prematurely.¹⁹ Thus, in addition to sustaining the interaction, timely prescription of interventions aimed at such focuses promotes adherence to breastfeeding.

Although they have been implemented in care, the "stimulating", "encouraging" and "reinforcing" interventions were not prescribed by the nurses. This can give rise to two aspects for discussion. The first is that interventions involving support actions may not be perceived by nurses as a relevant part of their practices; therefore, they are invisible for impact analysis. The second is that non-recording of the prescription and implementation can contribute to discontinuity of care, as they depend on the knowledge and attitude of each professional to exist.¹⁶

The difference between the interventions prescribed in the medical charts and those only observed during the implementation of care reinforces the fact that, although records are recognized as important by the Nursing team and contribute to improving care quality, they are still a challenge in everyday assistance.⁷

Without a proper record of the Nursing Process stages, the quality assessment indicators are not evidenced. In addition to the difficulty analyzing the results of the assistance provided, this results in the invisibility of the work of professionals in the area,⁶ as well as the infeasibility of some interventions, which, if not recorded, do not exist.

In this sense, one of the strategies for behavioral change is the investment in continuing education directed to the technical, ethical and legal aspects of the Nursing records²⁰ and the use of information technological associated with standardized Nursing terminologies, which contributes to good quality recording.²¹⁻²²

Non-prescription of the interventions linked to some concepts of the theory (mother's role; organizational systems for the protection, promotion and support of breastfeeding; woman's body image; woman's perception; child's perception; family and social authority and women's decision-making) can be the reflection of the influence of the biomedical model in Nursing care planning and implementation. In addition to the biological and technical-scientific aspects, the care provided to the mother-child binomial includes the social, emotional, spiritual and cultural aspects. These aspects can be decisive for women's decision-making about the breastfeeding process. ²³⁻²⁴ To transcend the biological and technical-scientific aspects and devise a comprehensive and multifactorial

view, it is fundamental to sensitize Nursing professionals and train them from the beginning of their academic training, giving continuity to permanent education. 11-12

In turn, it is worth reflecting on the importance of some interventions that were observed in less than half of the care implementations. The "explaining the importance of breastfeeding" intervention can support beginning and success of the breastfeeding process, as the puerperal woman will be able to identify the benefits of the process for the mother-child binomial.²⁴ Interventions to encourage the expression of feelings and those to stimulate decision-making in relation to care contribute to relieving anguish and to empowering women in a troubled period such as the puerperium. Finally, the interventions related to demonstrating massage and milking, as well as breastfeeding positions, can be differentials for the application of the correct and adequate technique in the breastfeeding process. 12-13,16

It is considered that educational/demonstrative/informative interventions can increase adherence to breastfeeding. The findings reveal that this set of interventions is incorporated into everyday care since, in all observations, the "developing educational activities about breastfeeding"; "referring the parents to classes or support groups about breastfeeding" and "providing written material about breastfeeding" interventions were present. 11,13

Non-existence of Nursing interventions related to the "space to breastfeed" concept is considered by the indication that the Rooming-In area is adequate for the physical and emotional conditions necessary for breastfeeding, both for the Nursing team and for the puerperal women. On the other hand, in the everyday life of puerperal women, the absence of guidelines related to the space to breastfeed can bring about negative allusions to breastfeeding, such as lack of privacy and interference of cultural and family factors. The Interactive Theory of Breastfeeding reinforces that the place where mother and child are exerts an influence on the breastfeeding process and on communication between them.²⁵

The number of interventions that were not prescribed or observed can draw the attention of nurses and their teams towards assistance-related gaps. Although some of them can be partially explained by the fact that the observations were carried out in the Rooming-In area and, therefore, there was no suitability for their existence in that scenario;³ others are fundamental for breastfeeding continuity, such as guidance on the human milk storage.

One possibility to overcome the assistance-related gaps is to include guidelines for discharge, at which time continuity of health promotion and disease prevention actions is encouraged. Interventions such as the identification of possible signs of irritability in the newborn and the tone of the tongue are key aspects to direct the investigation of abnormalities that interfere with the breastfeeding process;^{16,18} and teaching the parents to recognize the signs of hunger and satiety in the newborn and teaching about the factors that favor or hinder milk production can reduce the parents' stress, as the newborn's crying and frequent nursing sessions are interpreted as signs of low milk.¹⁶

Another important intervention that was not observed was "teaching about the importance of avoiding the use of pacifiers, bottles and teats", which points to the need to improve the guidelines offered in the service, as it is a consensus that use of such devices interferes with exclusive breastfeeding.¹¹⁻¹³

The limitation of this study lies in the number of observations performed, which was minimized due to the observation time. Another point refers to the fact that the observations took place during the restrictive period for visits, due to the COVID-19 pandemic, which interfered with the implementation of interventions that included family members.

In a complementary way, this study contributes to the incorporation of a methodological approach, which can be replicated in analyses of the applicability of Nursing interventions from ICNP® terminology subsets.

Conclusion

Nursing interventions from the ICNP® terminology subset for the assistance provided to women and children in the breastfeeding process are applicable in the Rooming-In area. Appropriation and use of the terminology subset by nurses can enhance adequate records, with standardized language, and provide access to a set of interventions for planning the assistance to be provided in this care space. This contributes to visibility of the Nursing team, professionals who play a decisive role in caring for women and children in the breastfeeding process.

The findings reveal a limitation in the recording of prescriptions and evaluation of Nursing interventions that interferes with the visibility and viability of the profession, as it does not allow assessing the impact of the outcomes of the Nursing practices. On the other hand, this limitation and the other findings of this study can guide teaching-learning plans and research studies directed to the theme, in order to discuss the importance of records, of the Nursing actions that are not recorded, and of interventions that are not even recorded, prescribed or implemented by the professionals.

References

- 1. International Council of Nurses (ICN). Guidelines for ICNP catalogue development [Internet]. Geneva (CH): International Council of Nurses; 2017 [cited 2020 Sept 23]. Available from: https://www.icn.ch/sites/default/files/inlinefiles/Guidelines%20for%20ICNP%20Catalogue%20Development%202018.pdf
- 2. Clares JWB, Freitas MC, Guedes MVC, Nóbrega MML. Construction of terminology subsets: contributions to clinical nursing practice. Rev Esc Enferm USP. 2013;47(4):965-70. doi: 10.1590/S0080-623420130000400027
- 3. Primo CC, Resende FZ, Garcia TR, Duran ECM, Brandão MAG. ICNP® terminology subset for care of women and children experiencing breastfeeding. Rev Gaúcha Enferm. 2018;39:e2017-0010. doi: 10.1590/1983-1447.2018.2017-0010
- 4. Passinho RS, Primo CC, Fioresi M, Nóbrega MML, Brandão MAG, Romero WG. Elaboration and validation of an ICNP® terminology subset for patients with acute myocardial infarction. Rev Esc Enferm USP. 2019;53:e03442. doi: 10.1590/S1980-220X2018000603442
- 5. Canicali Primo C, Brandão MAG. Interactive theory of breastfeeding: creation and application of a middle-range theory. Rev Bras Enferm. 2017;70(6):1191-8. doi: 10.1590/0034-7167-2016-0523
- 6. Liang YW, Chang HF, Lin YH. Effects of health-information-based diabetes shared care program participation on preventable hospitalizations in Taiwan. BMC Health Serv Res. 2019;19(1):890. doi: 10.1186/s12913-019-4738-1
- 7. Ferreira LL, Chiavone FBT, Bezerril MS, Alves KYA, Salvador PTCO, Santos VEP. Analysis of records by nursing technicians and nurses in medical records. Rev Bras Enferm. 2020;73(2): e20180542. doi: 10.1590/0034-7167-2018-0542
- 8. Querido DL, Christoffel MM, Nóbrega MML, Almeida VS, Andrade M, Esteves APVS. Terminological subsets of the International Classification for Nursing Practice: an integrative literature review. Rev Esc Enferm USP. 2019;53:e03522. doi: 10.1590/S1980-220X2018030103522
- 9. Malta M, Cardoso LO, Bastos FI, Magnanini MM, Silva CM. STROBE initiative: guidelines on reporting observational studies. Rev Saúde Pública. 2010;44(3):559-65. doi: 10.1590/s0034-89102010000300021
- 10. Safari K, Saeed AA, Hasan SS, Moghadadam-Banaem L. The effect of mother and newborn early skin-to-skin contact on initiation of breastfeeding, newborn temperature and duration of third stage of labor. Int Breastfeed J. 2018;13(1):32. doi: 10.1186/s13006-018-0174-9
- 11. Rollins NC, Bhandari N, Hajeebhoy N, Horton S, Lutter CK, Martines JC, et al. Why invest, and what it will take to improve breastfeeding practices? Lancet. 2016;387:491-504. doi: 10.1016/S0140-6736(15)01044-2

- 12. Silva CM, Pellegrinelli ALR, Pereira SCL, Passos IR, Santos LC. Práticas educativas segundo os "dez passos para o sucesso do aleitamento materno" em um banco de leite humano. Ciênc Saúde Colet. 2017;22(5):1661-71. doi: 10.1590/1413-81232017225.14442015
- 13. Coca KP, Pinto VL, Westphal F, Mania PNA, Abrão ACFV. Bundle of measures to support intrahospital exclusive breastfeeding: evidence of systematic reviews. Rev Paul Pediatr. 2018;36(2):214-20. doi: 10.1590/1984-0462/;2018;36;2;00002
- 14. Rocha GP, Oliveira MCF, Ávila LBB, Longo GZ, Cotta RMM, Araújo RMA. Condicionantes da amamentação exclusiva na perspectiva materna. Cad Saúde Pública. 2018;34(6):e00045217. doi: 10.1590/0102-311X00045217
- 15. Nascimento JSG, Pires FC, Pereira LA, Borges FCM, Silva TCS. Processo de orientação para amamentar: a desarticulação da educação realizada à beira do leito. Rev Atenção Saúde. 2017;15(54):13-20. doi: 10.13037/ras.vol15n54.4759
- 16. Emidio SCD, Oliveira VRRF, Carmona EV. Mapping of nursing interventions on breastfeeding establishment in a neonatal unit. Rev Eletrônica Enferm. 2020;22:61840. doi: 10.5216/ree.v22.61840
- 17. Cirico MOV, Shimoda GT, Oliveira RNG. Healthcare quality in breastfeeding: implementation of the nipple trauma index. Rev Gaúcha Enferm. 2016;37(4):e60546. doi: 10.1590/1983-1447.2016.04.60546
- 18. Carreiro JA, Francisco AA, Abrão ACFV, Marcacine KO, Abuchaim ES, Coca KP. Breast feeding difficulties: analysis of a service specialized in breastfeeding. Acta Paul Enferm. 2018;31(4):430-8. doi: 10.1590/1982-0194201800060
- 19. Dias JS, Vieira TO, Vieira GO. Factors associated to nipple trauma in lactation period: a systematic review. Rev Bras Saúde Matern Infant, 2017;17(1):27-42. doi:10.1590/1806-93042017000100003
- 20. Barreto JJS, Coelho MP, Lacerda LCX, Fiorin BH, Mocelin HJS, Freitas PSS. Nursing records and the challenges of the implementation in the assistance practice. Rev Min Enferm. 2019;23:e-1234. doi: 10.5935/1415-2762.20190082
- 21. Pinto VRS, Ferreira SCM. Computerized tool to calculate nursing quality indicators: a methodological research. Online Brazilian J Nurs. 2014;13:382-5. doi:10.5935/1676-4285.20144745
- 22. Soares CR, Peres HHC, Oliveira NB. Processo de Enfermagem: revisão integrativa sobre as contribuições da informática. J Health Inform [Internet]. 2018 out-dez [acesso em 2021 set 27]; 10(4):112-8. Disponível em: http://www.jhi-sbis.saude.ws/ojs-jhi/index.php/jhi-sbis/article/view/550/342
- 23. Witten C, Claasen N, Druger HS, Coutsoudis A, Grobler H. Psychosocial barriers and enablers of exclusive breastfeeding: lived experiences of mothers in low-income townships, North West Province, South Africa. Int Breastfeed J 2020,15:76. doi: 10.21203/rs.2.19148/v3
- 24. Primo CC, Nunes BP, Lima EFA, Leite FMC, Pontes MB, Brandão MAG. Which factors influence women in the decision to breastfeed? Invest Educ Enferm. 2016;34(1):198-217. doi: 10.17533/udea.iee.v34n1a22
- 25. Primo CC, Mocelin HJS, Zavarize TB, Lima EFA, Brandão MAG. A percepção da mulher sobre os espaços para amamentar: suporte na teoria interativa de amamentação. REME Rev Min Enferm. 2019;23:e-1161. doi:10.5935/1415-2762.20190109

Funding/Acknowledgment: Graduate Support Program for Community Higher Education Institutions (*Programa de Suporte à Pós-Graduação de Instituições Comunitárias de Educação Superior*, PROSUC)/Coordination for the Improvement of Higher Level Personnel (*Coordenação*

de Aperfeicoamento de Pessoal de Nível Superior, CAPES) and National Council for Scientific and Technological Development (CNPq) (Research Productivity Grant - Process No. 305241/2018-4).

Authorship contributions

1 - Odette Moura dos Santos

Nurse. MSc student in Health Technology - E-mail: odettemourads@gmail.com Conception and/or development of the research and/or writing of the manuscript.

2 – Fernanda Broering Gomes Torres

Nurse. MSc and PhD in Health Technology - E-mail: ferbroering@yahoo.com.br Conception and/or development of the research and/or writing of the manuscript.

3 - Denilsen Carvalho Gomes

Nurse. PhD in Health Technology - E-mail: deni.gomesc@gmail.com Conception and/or development of the research and/or writing of the manuscript.

4 – Cândida Caniçali Primo

Nurse. PhD in Nursing - E-mail: candidaprimo@gmail.com Conception and/or development of the research and/or writing of the manuscript; as well as review and approval of the final version.

5 - Marcia Regina Cubas

Corresponding author

Nurse. PhD in Nursing - E-mail: m.cubas@pucpr.br

Conception and/or development of the research and/or writing of the manuscript; as well as review and approval of the final version.

Scientific Editor: Tânia Solange Bosi de Souza Magnago

Associated Editor: Graciela Dutra Sehnem

How to cite this article

Santos OS, Torres FBG, Gomes DC, Primo CC, Cubas MR. Applicability of Nursing interventions in the breastfeeding process. Rev. Enferm. UFSM. 2022 [Accessed on: Year Month Day]; vol.12 e31: 1-19. DOI: https://doi.org/10.5902/217976968259