Original Article

TEXTO & CONTEXTO ENFERMAGEM
TEXT & CONTEXT NURSING TEXTO & CONTEXTO ENFERMERÍA

FAMILY LEARNING DEMANDS ABOUT POST-NATAL NEWBORN CARE

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ABSTRACT

Objective: to analyze the learning demands of puerperal women and their families about postnatal newborn care based on their knowledge and practices.
Method: this is a qualitative research developed through the Dynamis of Concrete of the Sensitive Creative Method, with 19 puerperal women and families of low-risk newborns, in a municipal hospital in Rio das Ostras, Rio de Janeiro, Brazil, from March to June 2019. Data were submitted to lexicographic analysis using the software IRaMuTeQ.
Results: different families' knowledge and practices regarding postnatal newborn care were identified, in addition to different learning demands related to newborns' body hygiene, including bathing and handling the umbilical stump, and nutrition, in relation to breastfeeding and use of artificial nipples.
Conclusion: health professionals, including nurses, need to develop dialogical educational practices based on families' learning demands, from prenatal care, going through the discharge process in the maternity hospital, until post-discharge in primary care, aiming at promoting safe and quality care for newborns.

DESCRIPTORS: Newborn. Care, Postnatal. Infant Care. Family. Neonatal Nursing.

HOW CITED: Santos AST, Góes FGB, Ledo BC, Silva LF, Bastos MPC, Silva MA. Family learning demands about post-natal newborn care. Texto Contexto Enferm [Internet]. 2021 [cited YEAR MONTH DAY]; 30:e20190352. Available from: https://doi.org/10.1590/1980-265X-TCE-2019-0352

DEMANDAS DE APRENDIZAGEM DE FAMÍLIAS SOBRE CUIDADOS PÓS-NATAIS DE RECÉM-NASCIDOS

RESUMO

Objetivo: analisar as demandas de aprendizagem de puérperas e familiares sobre cuidados pós-natais de recém-nascidos a partir de seus saberes e práticas.
Método: pesquisa qualitativa, desenvolvida através da Dinâmica do Concreto, do Método Criativo Sensível, com 19 puérperas e familiares de recém-nascidos de baixo risco, em um hospital municipal de Rio das Ostras, Rio de Janeiro, Brasil, de março a junho de 2019. Os dados foram submetidos à análise lexicográfica, com auxílio do *software* IRaMuTeQ .
Resultados: foram identificados distintos saberes e práticas das famílias sobre os cuidados pós-natais de recém-nascidos, além de diferentes demandas de aprendizagem correlacionadas à higiene corporal do recém-nascido, incluindo banho e manejo do coto umbilical, e à nutrição, em relação ao aleitamento materno e uso de bicos artificiais.
Conclusão: profissionais de saúde, incluindo enfermeiros, precisam desenvolver práticas educativas dialógicas a partir das demandas de aprendizagem das famílias, desde o pré-natal, perpassando o processo de alta na maternidade, até o pós-alta na atenção primária, visando à promoção de cuidados seguros e de qualidade aos recém-nascidos.

DESCRITORES: Recém-nascido. Cuidado Pós-natal. Cuidado do Lactente. Família. Enfermagem Neonatal.

APRENDIZAJE DE LAS DEMANDAS DE LAS FAMILIAS SOBRE EL CUIDADO POSNATAL DE LOS RECIÉN NACIDOS

RESUMEN

Objetivo: analizar las demandas de aprendizaje de las puérperas y sus familias sobre el cuidado posnatal del recién nacido a partir de sus conocimientos y prácticas.
Método: investigación cualitativa, desarrollada a través de la Dinámica del Concreto, el Método Creativo Sensible, con 19 puérperas y familiares de recién nacidos de bajo riesgo, en un hospital municipal de Rio das Ostras, Rio de Janeiro, Brasil, de marzo a junio de 2019. Los datos fueron sometidos a análisis lexicográfico, con la ayuda del *software* IRaMuTeQ.
Resultados: se identificaron diferentes conocimientos y prácticas de las familias sobre el cuidado posnatal del recién nacido, además de diferentes demandas de aprendizaje relacionadas con la higiene corporal del recién nacido, incluyendo el baño y manejo del muñón umbilical, y la nutrición, en relación a la lactancia materna. y uso de pezones artificiales.
Conclusión: los profesionales de la salud, incluido el enfermero, necesitan desarrollar prácticas educativas dialógicas basadas en las demandas de aprendizaje de las familias, desde el prenatal, pasando por el proceso de alta en la maternidad, hasta el post egreso en atención primaria, con el objetivo de atención segura y de calidad para los recién nacidos.

DESCRIPTORES: Recién Nacido. Atención Postnatal. Cuidado Infantil. Familia. Enfermería Neonatal.

INTRODUCTION

Despite international goals, such as the Millennium Development Goals and Sustainable Development Goals, and Brazilian public policies, such as the Brazilian National Policy for Comprehensive Child Health Care (*Política Nacional de Atenção Integral à Saúde da Criança*), it is estimated that more than 70% of neonatal deaths occur due to preventable causes, especially due to inadequate attention to pregnant women, childbirth, birth, and newborn.[1]

The birth of a child, although it is a common and usually expected and desired event, proves to be one of the most intense transitions that a family system faces, being able to generate unwanted adaptive responses before multiple changes required, which can constitute a risk for families' health and well-being and for the child's healthy and harmonious development.[2]

Postnatal care is, therefore, of indescribable importance for newborns' development and survival, especially because they have different vulnerabilities due to the biological, environmental, socioeconomic and cultural risks inherent in this phase of life.[3] In this directive, this transitional period must involve the performance of habitual and daily care, such as nutrition, hygiene and protection, with safety, quality and autonomy in the social and family context.[4]

Community care, such as exclusive breastfeeding and correct hygiene, including the umbilical stump, are preventive and basic practices that significantly contribute to reducing neonatal morbidity and mortality.[5–6] However, families have their own body of knowledge derived from previous experiences, which makes them hold unique knowledge built in life trajectories.[7]

Therefore, in the postnatal period, erroneous care practices can be performed and/or new learning demands can emerge and affect newborns' health, directly or indirectly. Therefore, the development of educational strategies by health professionals, including nurses, depends on the alliance between scientific and popular knowledge; the latter is being the starting point for the construction of dialogical and problematizing practices that this transitional process.

Starting from the premises of problematizing education defended by Paulo Freire, who seeks to break the verticality of banking practice and propose, through dialogicity, a cross-sectional relationship between subjects, we believe in the urgency of educational practices based on the concrete reality of people so that knowledge is built, experienced and articulated in a collective and participatory way.[8]

By recognizing the real demands of families, nurses are able to develop contextualized guidelines that contribute to the autonomy and safety of puerperal women and their families in carrying out home care with newborns, which will favor the reduction of neonatal morbidity and mortality from preventable causes.

Scientific evidence on families' knowledge and actions regarding newborn care, which underpin the development of educational strategies, are rare. Therefore, this research aimed to analyze the learning demands of puerperium women and their families about postnatal newborn care based on their knowledge and practices.

METHOD

This is a descriptive research, with a qualitative approach, in which puerperal women and family members aged 18 years or older participated, whose newborns were clinically stable and admitted to a rooming-in of a municipal hospital in Rio das Ostras, Rio de Janeiro, Brazil. Puerperal women who presented clinical complications at data production, and/or puerperal and family members with some cognitive and mental limitations and/or high-risk newborns were excluded.

Participants were recruited personally by the researchers in the ward environment where puerperal women were hospitalized, followed up by their family members, after the study was clarified. Some puerperal women, who reported tiredness or pain, refused to participate. The number of participants was limited, during the fieldwork, by data theoretical saturation.[9]

For data production, we opted using a Creativity and Sensitivity Dynamics (CSD), the Dynamics of Concrete, originating from the Creative-Sensitive Method, characterized by caregivers' explicitity in implementing a care practice, combining typical methods of qualitative research traditional (participant observation, collective interview and group discussion), mediated by Freirian reflexive criticism, with artistic productions based on a Debate Generating Question (DGQ).[10–11]

The dynamics took place in a private environment of the institution, between March and June 2019, with an average duration of 20 minutes. A static vinyl mannequin with dimensions similar to a baby's body was used, adapted with a fictitious plastic umbilical stump and clamp attached to it. In dramatization, appropriate and inappropriate materials for postnatal care were provided, such as pacifier, baby bottle, coffee powder, umbilical band, coin, Povidine, gauze, cotton, 70% alcohol, cotton swab, disposable and cloth diaper, ointment against diaper rash, wet wipes, bathtub, shampoo, liquid and bar soap, perfume, talc, toothbrush, toothpaste, silicone gum massager, scissors with and without tip, pieces of clothing and procedure glove.

The CSD occurred in five moments: (a) organization and welcoming of participants; (b) presentation of the group and explanation of the dynamics, availability of materials and exhibition of DGQ: how do you intend to take care of your newborn at home?; (c) separation by each participant of the materials that they would use, with a later enunciation of the individual experience at the collective level, through speech and demonstration on a mannequin of postnatal care practices to be performed with babies. Convergent and divergent subjects were recorded, of which the generating themes were codified; (d) decoding the generating themes into sub-themes during collective analysis and group discussion; (e) synthesis of the topics covered and validation of data by participants.[11]

The dynamics were recorded on digital media and transcribed in full, which generated the primary data source submitted to lexicographic analysis, using the software *R interface for Multidimensionnelles de Textes Et de Questionnaires* (IRaMuTeQ) by Word Cloud and Descending Hierarchical Classification (CHD).

This study was approved by a Research Ethics Committee. Data were produced after signing the Informed Consent Form and the Audio Recording Authorization Statement. For anonymity, an alphanumeric code (M - mothers, F - fathers, and A - aunts) was used, by order of participation.

RESULTS

Eight dynamics were carried out with 19 family members (100%), with an average participation of two to three per dynamics. There were ten puerperal women (52.63%), five aunts (26.32%) and four fathers (21.05%). Most were between 21 and 25 years old (36.84%), had completed high school (47.37%) and had previous children (89.47%).

Textual corpus consisted of eight texts, separated into 243 text segments (TS), with a total of 8,124 words occurrences,1,160 distinct words and 594 with a single occurrence (hapax). Hierarchical analysis retained 203 TS, obtaining an 83.54% utilization. After reducing the words to their roots, 803 stem cells were obtained, which resulted in 705 active forms that could be analyzed. By the Word Cloud method, words of greater recurrence were identified, based on frequency, with those showing greater than the others in Figure 1, namely: no, use and why, which appear, respectively,410, 224 and 105 times in transcripts.

Figure 1 – Word Cloud. Rio das Ostras, RJ, Brazil, 2019

The materials referring to recurrent postnatal care in participants' statements were: diaper (43), 70% alcohol (38), ointment (33), pacifier (28), baby bottle (27), coin (26), cotton swab (26), soap (23), gauze (21), shampoo (21), clothes (20), talc (19), and scissors (19). However, using these materials, with the exception of diapers and clothing, was controversial during the dynamics, giving rise to reflections and doubts. Such terms are consistent with the CSD used, in which participants explained and demonstrated how they intended to care for their babies, separating the materials they would not use in this care, seeking to explain the reason for this choice, which is detailed later.

By CHD, through the grouping as to the occurrence of words, six classes of text segments were formed. The dendrogram in Figure 2 summarizes the classes, words that compose them and percentage in relation to the total of the corpus analyzed.

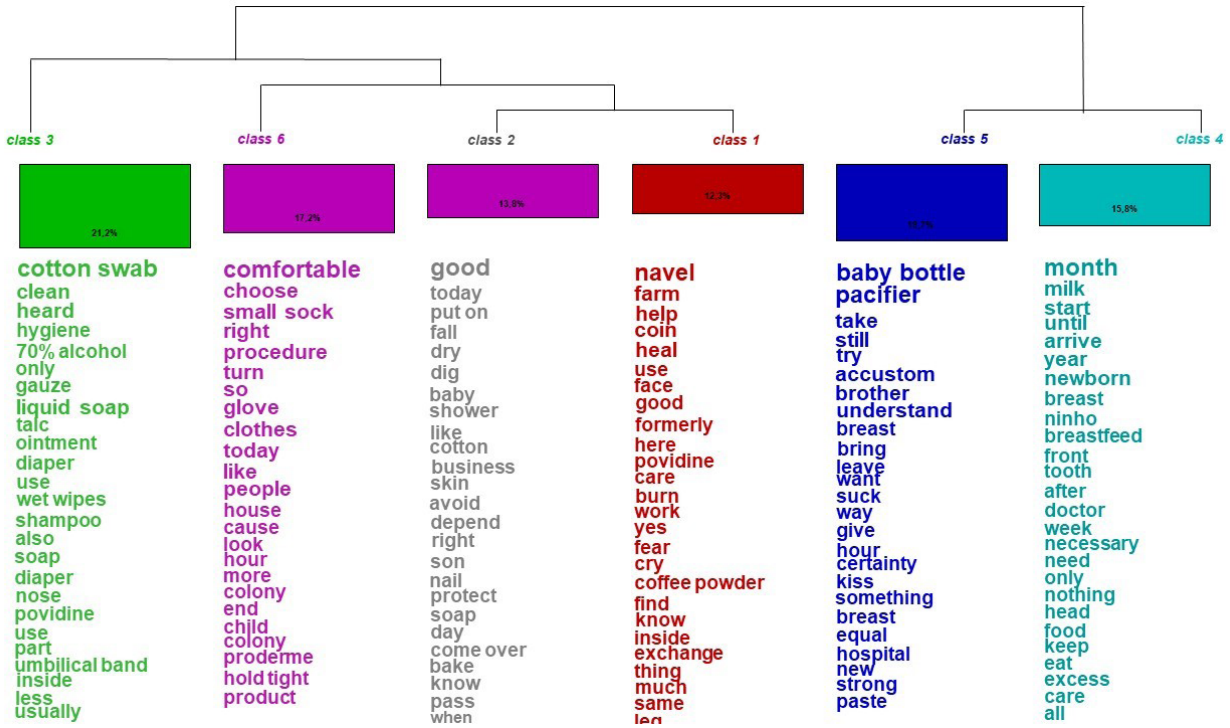

Figure 2 – Descending Hierarchical Classification dendogram, RJ, Brazil, 2019

In the dendogram, textual corpus was divided into two subcorpus. The first, composed of Class 3, with a second subdivision comprising Class 6, and a third comprising Classes 2 and 1, associated with each other and related to Class 6. The other subcorpus contains text fragments related to Class 5 and 4. All classes were thoroughly analyzed in order to understand and name each one, namely: Class 1: care for newborns' bath; Class 2: umbilical stump care Class 3: materials used in hygiene of newborns; Class 4: newborn nutrition; Class 5: use of artificial nipples; Class 6: decision-making power in newborn care.

Care regarding newborn hygiene

The first subcorpus contains Classes 1,2, 3 and 6, in which the contents addressed by puerperal women and family members deal with care practices concerning newborn hygiene. Class 1 includes textual fragments referring to newborns' bathing care. For the realization of this moment, two puerperal women reported cleaning the bath with 70% alcohol, while one participant reported using alcohol in the bath water. Concerning water temperature, two parents reported that they intended to use an ice bath, while the others, tepid water, checking the ideal temperature with the hand or forearm.

Average temperature, even a little lower, not cold and not warm. First, test here on the wrist, [...] *know the temperature that will be right* (A1).

The best thing is an ice bath, [...] *their immunity would come much faster* (F3).

Actions directed to care in the use of products, such as soap in babies' eyes at bathing time, were reported by two components of the research. Care with the ears, also in the bath, and of placing babies' clothes in an appropriate place, free of drafts, to prevent pathologies, were recognized concerns of one participant's speech.

In Class 2, it is possible to verify different forms of umbilical stump care. Among them, using 70% alcohol, with gauze, cotton or cotton swab, after washing it with soap and water and drying it was reported by most participants, while two family members would use Povidine, and one of these also pointed out using herbal coriander.

70 alcohol [...] *in the navel. I wet the cotton and dripped, you have to put every diaper change in order to dry and fall.* [...] *put the gauze underneath so as not to drain* (A2).

In the country, we would use a lot of things, [...] *would make an herb coriander to help dry it out.* [...] *my mother had a child at home, so we came for navel care.* [...] *I will use Povidine* (F3).

Although it is considered an old practice, according to the statements of some family members, using umbilical band and a coin, in order to make the navel aesthetically beautiful, are still practices used today by participants, being a pre-established care practice from previous experiences. In some cases, these actions had not yet been employed due to the institutional protocol, which prohibits using these tools.

The coin is to make the navel look cute. After it fell, [...] *would use it* (F3).

The baby would use a coin and diaper [umbilical band]. [...] *the hospital does not allow it, but if he were already at home, he would already be using it to keep his navel deep* (M1).

In a report of one of the participants, there was a change in her practice of caring for the umbilical stump, since, previously, in her first child, she used an umbilical band, but currently she would not use it due to the critical reflection of the practice used that reverberated in new choices for this care. This criticality was also identified in the speech of another family member who analyzed practices employed by other people, disagreeing and, therefore, opting for what she considers most appropriate in baby care.

I wouldn't put it [umbilical band] *nowadays, I used to put it on my son before.* [...] *it can give them some kind of allergy or some little injury. I chose not to use it.* [...] *I think that the navel slaps and to heal, to dry, I think it will get wet* (A1).

It is genetic. In the past, everyone used it, but I didn't use it on my children (A2).

Class 3 covers the materials used to carry out newborn hygiene. The cotton swab was indicated for cleaning the ears; in some statements, its use was only specified outside the ear, for hygiene of babies' umbilical stump and nose. Moreover, one participant used it for hygiene of the intimate parts and skin folds. Still with regard to cleaning the ear, a family member mentioned using gauze to clean the dust from the outside, while a mother would use Povidine, in case of any alteration.

[Cotton swab] *for private parts, folds, which is more difficult, heard, sometimes you have to clean* (M5).

[Povidine] *if I see something strange in the ear,* [...] *some liquid coming out* (M1).

Concerning the type of soap used, only three participants opted for bar soap, while the others chose liquid, for convenience.

I bought [soap] *liquid for the sake of practicality* (M5).

I trust this stone soap more, [...] *I think it is the most suitable* (A1).

Only one family member reported that they would not use a wet wipe, and four would use ointment only in case of diaper rash, as everyone else would use these products at each diaper change.

There must always have wipes [moistened] [...]. *Diaper, ointment too, I use it even if I don't have anything, I go to prevent it, every diaper change* (M5).

However, one participant explained that the ointment offers protection mainly in burns, but through daily care and diaper change, in a certain way, checking if it is hurting the child, especially in the heat, this will not happen. Therefore, using this should happen only in the last case, because it crusts the skin, making it difficult to remove it when cleaning, especially for girls. A family member exposed another precaution to prevent diaper rash, the correct drying of the intimate region after bathing.

Four participants reported concern about using perfume, followed by talc and shampoo, due to the risk of allergy caused by the composition of these products with various chemical elements, and others pointed out that it is unnecessary, since babies already have their own smell or it is too early to start using it. Although some family members choose not to use cosmetics, most said they would.

Furthermore, using scissors to cut babies' nails was disregarded by many members of the study; for them, the nail falls alone in the first days of life. When it came to be used, the scissors of choice were the one without a tip, only two family members chose the one with a tip.

The baby's nail, we blow and fall. [...] *has no need for cutting* (M2).

I would use the one with curve [without tip]*, this one has a point,* [...] *it can hurt* (A1).

Learning demands emerged in participants' statements. Among these, three family members pointed out doubts regarding the need or not to cut babies' nails and, when necessary, whether it should be done with scissors with or without a point. Moreover, using ointment in children without diaper rash, a recurrent practice for the purpose of prevention, puzzled one participant.

The child sometimes does not have a diaper rash, why do you put it, then [ointment]*?* [...] *in logic, if it's not rashed, I don't need to put* (A4).

Considering newborns's fragility, fear was a feeling present in the statements. Two family members reported the fear of cutting babies' nails, one due to the trauma of hurting their other daughter, and a mother showed the fear of her son developing some type of allergy. This desire was also mentioned in umbilical stump care by two members, which also reflected in the bath, and from that point on, the figure of the grandmother emerged, a family support in this neonatal period.

I have a little [fear of the navel]*, I leave it to grandma, she has more experience. Scissors would not de used, because they are dangerous for the baby.* [...] *I cut my daughter's nail with scissors and I ended up injuring her finger,* [...] *I have trauma* (F1).

I don't know if I'm going to give [bath]*, because of the navel, I'm afraid* (A1).

Finally, in Class 6, the decision-making power of individuals, especially those with previous knowledge, is highlighted in providing care to newborns in the way they believe to be correct, choosing or not what they consider most appropriate. In this Class, the reports also point to the use of suitable clothing for newborns, such as gloves and socks, in order to avoid pathologies, such as a cold. One participant pointed out the importance of washing clothes only with water and coconut soap, as well as hand hygiene with alcohol gel before coming into contact with babies; the latter is also indicated by another family member.

Care related to newborn nutrition

The second subcorpus represented by Classes 4 and 5 emerges with a primary focus on newborn nutrition. Class 5 presents the use of artificial nipples, such as pacifiers and bottles. Nine of the interviewees were willing to use the pacifier, four of them reported the attempt to introduce this non-nutritive suction, but without success until the moment of the dynamics, noting the desire to keep trying until the baby accepted the tool to calm him down.

He doesn't get a pacifier, I try to give it to him, but he doesn't get it (M8).

I would use a pacifier, I will stop by a drugstore to buy one, because here I cannot (M7).

With regard to bottles, only mothers, who would not continue exclusive breastfeeding, and a father would choose this tool. A mother pointed out the importance of bottles in some cases, as in the experience she experienced, in which, due to her absence and the lack of utensils to offer the expressed milk, cross-breastfeeding was performed, when a family member who had also had a baby in the the same time she breastfed her son at the time.

I haven't given him a bottle yet, but I intend to, because I'm going to work. I haven't bought the bottle yet. Lucky me that my aunt [...] *fed him, but if I had a bottle, I could pump the milk* (M8).

Most of the statements in this Class pointed out that babies did not perform oral hygiene after breastfeeding, since they did not yet have teeth and milk would not impact on greater damage to oral health. Thus, hygiene would be initiated from the appearance of the first dentition. The minority of participants would perform oral hygiene with gauze.

I never did it until she had her teeth [...] *because it's just milk* (F1).

I believe it is very rare for a mother to do it, [...] *I don't know if it is exactly with the gauze, a very light thing passing through the gums, but newborn, not* (A1).

My mother-in-law is a nurse, and she tells us to clean our mouths [...] *to avoid getting those white pets,* [...] [with] *a gauze* (M5).

In Class 4, the intention of most puerperal women to breastfeed exclusively is remarkable; however, two mothers pointed out that due to returning to work, they would use formula. One of them would give in the first month of newborns's life along with teas, and the vegetable baby food would be introduced from the third month. Another reported the intention to initially carry out mixed breastfeeding; however, given the decrease in suckling of newborns to the breast, she presented uncertainty in proceeding and the possibility of offering only the formula in the bottle.

I will give other types of milk, because I work. From the age of three months on, I will start giving him the baby food, in this case, beaten vegetables. I took care of my brothers, so I saw no problem. Tea will also be giving (M1).

I would give the breast and the bottle, but unfortunately, he is not getting the right breast, I think I will have to give the bottle (M6).

For an aunt, even with breastfeeding, which meets all newborns' needs, including hydration, water supply in the shower is necessary on hot days, as milk, in their perspective, is a little saltier.

About 15 days, I would advise you to give a little water. It would be minimal just to be able, it is not to hydrate, because the milk itself hydrates, but on very hot days, [...] *the child has to drink a little water* (A1).

Still in this Class, a father reported, in view of his previous experiences, that from the second month of life the formula would be introduced through the bottle, due to the maternal absence, as well as the baby food from the age of four months, keeping the breast milk only until the age of six months, since none of her other children had negative repercussions with this type of food.

Two months will use milk [artificial] [...] *because we will need to leave. Four months would already be eating a baby food. Six months, I was already pulling out of my chest. From then on, I started to grind the rice and that bean drip* (F3).

DISCUSSION

The textual corpus obtained a good use in the descending hierarchical analysis, considering that it reached a percentage higher than 75%, as recommended by the literature, i.e., the textual material was considered useful to carry out this type of analysis in an appropriate manner.[12]

In the research, the presence of young adult women with previous experiences of motherhood was prevalent, which directly impacts the decision regarding the care they consider most appropriate with newborns from their body of knowledge built in the trajectory of their lives, reporting also for the perpetuation of the female legacy of care.[13]

Immersion bath with warm water, which varies between 35ºC and 37-5ºC, is one of the most suitable for newborns, and the temperature should be checked before placing the baby in the water.[14–15] However, some study participants reported using cold bath, a practice that can interfere with thermoregulation, causing hypothermia, which is harmful to newborns' health.[16] Acohol in the bath water, as reported, dehydrates the skin, causing injuries and, consequently, infections.[17] Therefore, there are learning demands related to bathing newborns that need to be considered in educational practices with families.

Bath should be short, five to ten minutes, while frequency varies according to the local culture. However, it is recommended that it occurs approximately twice a week until the baby starts to crawl, provided that the folds, cord and diaper area are cleaned. The bathtub, during the bath, must be placed on a hard surface, in a closed and heated place, and disinfected before and after its use. Bathing as part of the night routine can be beneficial in improving babies' sleep and mood.[14–15] Such care also needs to compose the list of guidelines to be developed with family members, through methodologies appropriate to the target audience.

Practices arising from popular beliefs, such as using Povidine, herbal coriander, band and coin on the umbilical stump, are not recommended, given the absence of benefits to babies and an increased risk of infections, such as omphalitis and its complications.[18] Also, herbal therapy can cause reactions, with allergic contact dermatitis being the most common,[19] while using povidone-iodine is toxic and may cause hypothyroidism. Such findings denote mistaken knowledge, which reaffirms the need for safe guidance and care regarding the technique and products indicated to accelerate the umbilical stump ischemia process, to reduce the risk of infection, responsible for 30% of all neonatal mortality.[14]

Regarding care with umbilical stump, the recommendations vary according to each country. In developed countries, with a low neonatal mortality rate, the dry care technique is recommended, i.e., clean and dry stump, considering the reduced risk of infections. In underdeveloped and developing countries, such as Brazil, with high rates of infection and neonatal mortality, the application of an antiseptic solution is recommended. Significant evidence points out that the topical application of

4% chlorhexidine to the umbilical stump is the most indicated, given its impact in reducing infections, including omphalitis, and neonatal mortality.[6]

However, in Brazilian territory, the recommended by the Ministry of Health (MoH) and the Brazilian Society of Pediatrics (SBP - *Sociedade Brasileira de Pediatria*), is that at the end of the bath, carried out with water and neutral soap, the stump must be dried and at its base apply 70% alcohol, and also to each diaper change, in order to speed up mummification and fall, this type of care being the most recurrent in the statements. However, 70% alcohol does not provide drying, has less antibacterial effect than other antimicrobials, delays the fall of the cord, in addition to causing cutaneous hemorrhagic necrosis and serum levels with toxicity, unlike chlorhexidine, which has systemic absorption without toxic effects. However, it is a low-cost and easily accessible product, which has spread its use.[14]

Such divergences between the best scientific evidence and the official recommendations on the solution to be applied to the umbilical stump need to be reviewed and agreed upon by competent bodies, since they imply the possibility of antagonistic practices in health services and in the guidance of professionals, hindering the adoption of good practices, which, therefore, can cause damage to babies' health.

In caregivers' statements, it was found that care practices are permeated by a historical-cultural legacy, i.e., specific popular knowledge spread across generations; therefore, the primary learning process occurs in family relationships. However, in the statement of some participants, the transition from naive awareness to critical awareness was observed,[8] insofar as they acknowledged external care or previously employed, but opted to change the pre-established practice that they considered wrong.

That said, the importance of educational programs based on sensitive listening about popular practices and dialogue is reinforced so that a relationship of trust and respect is established between caregivers and health professionals, which allows the approximation of knowledge and practices to that new knowledge can be built, if necessary, and, thus, avoid practices harmful to newborns' health.[18]

As for cleaning agents, they should be mild, without fragrance and non-irritating to the baby's skin and eyes. Furthermore, they must be synthetic (Syndets), with a neutral pH, or slightly acidic, between 4.5 and 7.0, so as not to alter the protective acid mantle of the skin surface. Glycerin soaps can remove water from the skin causing dryness and skin irritation. Liquid or bar soaps can be used, as long as they respect these recommendations.[14–15] Although family members choose to use liquid soap due to its practicality and smell, the questions regarding pH were not mentioned, which implies the need for guidance on the subject.

Cosmetic products (perfumes, soaps and shampoos) in general should be avoided, since most of them have substances that are potentially toxic and harmful to baby's skin, which can trigger allergic processes, and the alcohol present in these solutions can cause burns, especially in low weight babies.[17]

Talc is also not recommended in babies due to the risk of accidental inhalation, which can cause edema and inflammation of the bronchial mucosa and progress to typical acute lung injury.[13,20] Most members of this research pointed out the use of this product, inferring a gap in prenatal care and in the process of discharge from motherhood, which needs to rescue this type of guidance from caregivers, in order to rule out practices can put newborns' lives at risk.

Diapers, preferably disposable, must be changed frequently so that they are clean and dry. Perineum hygiene with warm water and soap-free cotton is sufficient for daily urine cleaning. For stools, using soaps with a minimum of perfume is indicated.[15] Wipes, although practical, as indicated by family members, are not recommended due to the risk of removing the lipid film from the skin and causing sensitization, which can cause injuries. The routine use of topical preparations to prevent diaper dermatitis, although it occurs indiscriminately, as reported, is not necessary for children with

normal skin, as its components have the potential to cause contact sensitization, irritation and/or percutaneous toxicity.[21]

Babies' nails should be kept clean and short, using scissors with no specific tip for this population, to avoid skin lesions.[22] As for babies' clothes, they should be washed separately with mild soap.[23] Still, caregivers' hand hygiene, with water and soap or alcoholic solution, when handling the umbilical stump or when changing diapers are essential and beneficial measures in reducing infections,[14] which was signaled by few participants. Therefore, numerous learning demands related to baby hygiene have emerged and need to be addressed in educational health practices.

Using pacifiers in infants is contraindicated by the MoH and the Brazilian Society of Pediatrics, as there is a possibility of negatively interfering with exclusive breastfeeding and by association with changes in the palate and infections, such as otitis, oral candidiasis and dental cavity. However, it is noted in participants' statements that pacifiers are widely used as a calming agent for babies.[24]

In contrast, the American Academy of Pediatrics does not support the prohibition of pacifiers, despite the 9th item of the WHO's ten steps to successful breastfeeding, considering its benefits in reducing the risk of sudden infant death by improving the development of the neural pathway, mouth breathing, excitation threshold, reduction of gastroesophageal flows, respiratory function, cardiac system control, oral motor function, autonomous functioning and babies' sleeping patterns,[25–27] which also reveals contradictions between evidences scientific and official recommendations.

Using a bottle is not recommended due to prejudice to the success of exclusive breastfeeding due to "confusion of nipples", directly interfering in the suction of the breast, generating differences in the orofacial structures and nasal breathing.[28] However, it was observed in the study that given the impossibility of being with their children, puerperal women would choose to use this tool. Furthermore, the absence of a bottle was linked to cross-breastfeeding, revealing a lack of knowledge about the dangers related to this practice, which should be avoided considering the risk of vertical transmission of diseases to newborns, with HIV/AIDS,[29] presents as an important demand for learning to be explored by health professionals.

From the first days of life, adoption of oral health care must be encouraged in order to prevent the onset of oral diseases in early childhood. Therefore, newborn oral hygiene should be performed daily with filtered water and clean gauze/diaper.[13] Despite this recommendation, most family members do not provide this care; therefore, it is essential to continue the practice of educational sessions to promote safe care for newborns to address these demands.

Worldwide, exclusive breastfeeding is recommended until the sixth month of life, as it is a protective factor to reduce the risk of death from infectious disease, in addition to the positive impacts on children's health in the short, medium and long term. After that age, supplementation with other foods is necessary to supply nutrient needs, preferably maintaining breast milk for up to two years or more.[27]

In this regard, although most family members recognize the importance of breast milk, it is possible to identify erroneous practices in breastfeeding. Thus, health professionals must emphasize the orientation of this care, signaling the implications of the early introduction of water, other milks and food, as well as viable alternatives, based on the concrete reality of these individuals, in order to minimize the implications of newborn early weaning.

From data analysis in contrast to the scientific recommendations, it was possible to identify different learning demands in newborn care, showing a gap in prenatal care and in the process of discharge from motherhood, while such unresolved doubts emerged in family members' speeches about their care practices, sometimes inadequate, referring to babies who were already under their care and, in some cases, with authorized hospital discharge.

Inappropriate practices, even if apparently minimal, can cause damage to babies' health.[13] Therefore, it is crucial that the preparation of families, by health professionals, especially nurses, occurs in a cross-sectional way, since prenatal care, in the process of transition from motherhood to home, in addition to subsequent consultations and home visits in care primary. Therefore, contextualized, dialogical and participatory educational practices are needed, which recognize the family member as a subject with their own knowledge, in order to meet different learning demands, thus envisioning the strengthening of family members as autonomous subjects in newborn care in the social-family context.[4,7]

Another survey also identified numerous information needs of families of premature babies admitted to intensive care. For the authors, only with this identification, effective communication between professionals and family members is possible, with the provision of contextualized guidelines that help to solve existing doubts about care,[30] which is in line with the findings of this study.

The research is limited in terms of data due to the only defined geographical context, which makes it necessary to carry out more studies that present different social realities and that add more knowledge about the phenomenon studied to develop educational practices in the field, in addition to the new findings presented.

CONCLUSION

Different knowledge and practices of families on postnatal newborn care were identified, often linked to cultural heritage. It is noted that, sometimes, many cares are idealized and performed in the wrong way, in opposition to scientific recommendations, which can have a negative impact on newborns' health and survival.

Learning demands related to body hygiene emerged, including bathing and umbilical stump management, and nutrition, in relation to breastfeeding and using artificial nipples. Such demands need to be problematized in the development of dialogical educational practices by health professionals, including nurses, from the prenatal period, going through the discharge process in the maternity ward, until the post-discharge in primary care.

It is necessary that nurses, when taking on the social role of health educators, develop educational actions based on dialogicity and the real needs of families. Thus, it will be possible to promote health and quality of life for newborns through the family nucleus empowerment, through safe and quality care promotion, with a consequent reduction in preventable neonatal deaths.

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NOTES

ORIGIN OF THE ARTICLE

This article was extracted from a course conclucion work - "*Demandas de aprendizagem de famílias sobre cuidados pós-natais de recém-nascidos*", which was presented to *Universidade Federal Fluminense* in 2019.

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ACKNOWLEDGMENT

We would like to thank the Institutional Scientific Initiation Scholarship Program (PIBIC - *Programa Institucional de Bolsas de Iniciação Científica*)/CNPQ for the financial support.

FUNDING INFORMATION

This study was financed by PIBIC/CNPQ (IC190055).

APPROVAL OF ETHICS COMMITTEE IN RESEARCH

It was approved by the Research Ethics Committee of a University Hospital of *Universidade Federal Fluminense*, under Opinion 3,100,491/2018 and CAAE (Certificate of Presentation for Ethical Consideration) 01381218.7.0000.5243.

CONFLICT OF INTEREST

There is no conflict of interest.

HISTORICAL

Received: February 03, 2020.
Approved: April 30, 2020.

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