SOCIAL MEDIA CONTENTS ABOUT PREMATURE INFANTS REPORTED BY FAMILY MEMBERS: QUALITATIVE STUDY

CONTEÚDOS SOBRE PREMATUROS VEICULADOS POR FAMILIARES EM MÍDIA SOCIAL: ESTUDO QUALITATIVO

CONTENIDOS SOBRE PREMATUROS VEICULADOS POR FAMILIARES EN MÍDIA SOCIAL: INVESTIGACIÓN CUALITATIVA

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ABSTRACT

Objective: to analyze contents about premature infants reported by family members using social media through image and written texts. Method: this is a qualitative study using image and social group analysis from social media. The study population consisted of posts on social media and the sample, by posts on social media posted by family members of premature children who engaged in a social media campaign to disseminate experiences in caring for premature children. The textual and imagery corpus of this study consists of 21 written and image texts. Results: the following two symbolic categories emerged: Care for sick preterm infants and Mother-preterm infant bond. Conclusion: family members shared written and imaged content related to premature infants’ care, especially in the hospital environment.

Descriptors: Infant, Premature; Family Relations; Social Media; Pediatric Nursing; Critical Care; Qualitative Research.

RESUMO

Objetivo: analisar os conteúdos sobre criança prematura, veiculados por familiares, em uma mídia social, por meio de textos de imagem e escritos. Método: estudo qualitativo, de análise de imagem e de grupo social, em mídia social. A população do estudo foi comporta por posts em mídia social e a amostra, por posts em mídia social postados por familiares de crianças prematuras que se engajaram em uma campanha na mídia social para divulgar as experiências no cuidado à criança prematura. O corpus textual e imagético deste estudo consta de 21 textos escritos e de imagem. Resultados: emergiram duas categorias simbólicas: Cuidado à criança prematura doente e Vínculo mãe e filho prematuro. Conclusão: os familiares compartilharam conteúdos escritos e de imagem relacionados aos cuidados com a criança prematura, sobretudo, no ambiente hospitalar.
Descritores: Recém-nascido Prematuro; Relações Familiares; Mídias Sociais; Enfermagem Pediátrica; Cuidados Críticos; Pesquisa qualitativa.

RESUMEN

Objetivo: analizar contenidos sobre prematuros reportados por familiares a través de redes sociales por medio de imágenes y textos escritos. Método: se trata de un estudio cualitativo que utilizó análisis de imágenes y grupos sociales de las redes sociales. La población de estudio consistió en publicaciones en redes sociales y la muestra por publicaciones en redes sociales publicadas por familiares de niños prematuros que participaron en una campaña en las redes sociales para difundir experiencias en el cuidado de niños prematuros. El corpus textual e imaginario de este estudio consta de 21 textos escritos con imágenes. Resultados: surgieron las siguientes dos categorías simbólicas: Cuidado del lactante prematuro y Vínculo madre-lactante prematuro. Conclusión: los miembros de la familia compartieron contenido escrito y imágenes relacionados con el cuidado del prematuro, especialmente en el ámbito hospitalario.

Descripciones: Recién Nacido Prematuro; Relaciones Familiares; Medios de Comunicación Sociales; Enfermería Pediátrica; Cuidados Críticos; Investigación cualitativa.

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INTRODUCTION

Prematurity is a worldwide public health issue. Annually, about 14.8 million children are born preterm (before 37 weeks of gestation), of which 2.3 million are born before 32 weeks of gestation, requiring intensive care, especially ventilatory support. Prematurity is a major cause of death for children (around 40%) and impacts infant mortality. The average world rate of preterm births is around 10%.

Since the 1990s, China, Estonia, Belarus, Kazakhstan, Georgia, Latvia, Turkey, Saudi Arabia, Azerbaijan, and Russia are the countries that have shown the greatest decrease in prematurity with rates between 6% and 8%. On the other hand, countries like India, China, Pakistan, Indonesia, Bangladesh, Philippines, Nigeria, Congo, United States, and Brazil have a prematurity rate higher than the world average and, of these countries, India, China, Brazil, and the United States are those with the highest number of preterm births. In Brazil, the rate of preterm births is 12.4% and, therefore, remains above the world average.

Perinatal care requires a service structure that offers health support and includes health workers, specialized exams and procedures, and follow-up protocols for preterm infants and their families. Children and family care should be guided in its entirety since the birth of a child generates changes in families and requires time for adaptation, whereas the birth of a preterm child can lead to a crisis in the family nucleus since such an event causes uncertainties, high emotional cost and changes on daily and future life.

The family must participate in educational processes on preterm children's care, child health services, and long-term care. In this sense, since the 2000s, the internet has become an important space for the exchange of health-related information to individuals and families, facilitating people's access to the most diverse types of knowledge, particularly in the 2007 emergence of the first social media.

In this sense, it is important to emphasize that, in the world, the search for health-related information is the third major reason for searching on the internet, whereas 18% of the activity of adult people on the internet aimed to search for people with the same health problems. The search for health-related content exists, transforming the virtual space into a new scenario of interaction between people and groups with common interests. However, there is little research on specific groups, such as families with preterm infants.

Social media has contributed to disseminating content that can assist families in providing health care. Among the most relevant social media channels are Instagram, Facebook, and Twitter due to the high number

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of subscribers and degree of engagement between people from different socio-cultural realities.9

These three social media channels disseminate written and imagetic contents on different topics and, thus, create content. Written contents include captions, comments, and hashtags, while imagetic contents correspond to photographs, illustrations, drawings, and videos. Imagetic contents can bring still or moving images and, in the context of health practices, propagate health information, reinforcing health behaviors to be taken or avoided. Therefore, images have an educational function.9

Instagram is an image social media and has some peculiarities that distinguish it from other visual platforms, such as Tumblr, Pinterest, and Flick. It requires the use of at least one image. While the other platforms are used to store images, Instagram works as a space for interaction between users, which characterizes it as social media and not just a virtual storage platform.9 On Instagram, imagetic content is considered "the starter" of the dialogues established between participants, so such a content is essential.

Instagram has been the fastest growing social media channel in the world and is used by government agencies, scientific associations, companies, professionals, families, and individual associations.10,11 It has been the object of study for several researchers whose focus of these studies has been the behavior of people on this channel, especially adults.12-14 We have found no previous studies on content related to prematurity on Instagram, although such content exists.

Instagram's written contents consist of captions, comments, and hashtags. A hashtag is a label for digital content on a specific topic consisting of a hash sign (#) combined with a word or phrase. In social media, hashtags can also be used to signal a theme, a campaign, or a cultural contest that, in turn, can be "a priori" or "a posteriori" defined. In the first case, a theme is thought about and mobilization is organized in advance to gain visibility during a certain period. In the second case, mobilization usually occurs without prior organization and, usually, after an event that sensitizes people.15

Cultural contests are, however, always organized a priori, allowing people to plan and participate in the activity, which is usually a mobilization on a specific cause or a draw. In both cases, everything happens through the propagation of written (words or hashtags) and imagetic (photography, painting, videos) contents.16

Imagetic contents can be used in different ways on social media, one of which is the cultural contests involving photographs, text, storytelling, or drawings. These contests need to have guidelines on the start and
end of the contest, instructions on how people can participate, and other clarifications.

From a scientific point of view, these events are particularly important as they allow observations of how people express opinions and behaviors (in written and in image format) about a certain social phenomenon.

In this sense, the following questions emerged: How did the families of preterm infants use social media to disseminate content on the preterm theme? What written and image content are being used by family members who participate in cultural contests? Which posts published by family members of preterm infants on social media achieve the greatest engagement?

**OBJECTIVE**

To analyze contents about premature infants reported by family members using social media.

**METHOD**

A qualitative study using social group analysis and image verification from social media was carried out. Qualitative research seeks to understand the meaning of a given experience or to explore a particular phenomenon from another’s point of view. Social group analysis aims to classify the power, centrality, and flow of data between people in a given group (on Instagram, for example), as well as determining how groups relate to each other and what other connections they make, virtually.

Image analysis studies are designed to analyze different types of information since an image can have several meanings. The image analyst has tools that make it possible to understand a certain image in a given context.

The present study population consisted of posts on social media, and the sample consisted of posts on Instagram, created by family members of preterm infants, who were engaged in a campaign to disseminate their experiences related to preterm care in a cultural contest. The following inclusion criteria were adopted: a) posts that used the hashtag of the cultural contest (#vidadeprematuro); b) still image posts (photography, drawings, illustrations, and graffiti art, for example). The exclusion criteria were a) instructional posts on how to participate in the cultural contest.

The study's scenario was Instagram, and the data collection (posts search) was carried out manually, using a portable computer and the "save image" mechanism. The collected content was organized in a folder. The posts were organized by engagement level, from the number of likes, and in addition to the imagetic content.

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(photos or illustrations), the written text (the caption) of each post was analyzed. The remaining subsequent comments were not analyzed. The data were collected between April and July 2018. The written content was analyzed by engagement level from the most to the least liked post, in which a frequency of up to 30 likes was considered “low engagement”, and 30 likes or more was considered “high engagement”.11

After the image searching, 48 images were selected for preliminary analysis of which 27 were excluded since 10 are videos and 17 are guidelines on the cultural contest and, therefore, are not images taken by family members. The corpus of this study consisted of 21 written and imagetic contents.

The image analysis performed comprised five stages. In the first, the textual corpus' selection of still images published by family members occurred. In the second stage, entitled the denotative phase, the type of image used in each post was identified and categorized as drawing, illustration, photograph, or painting.18 In the third stage, called the connotative phase, the characterized images (animals, people, or objects) were recognized and linguistic signs (phrases, words, or sentences) were used to interpret the content of the message propagated and to whom it was addressed.

In the fourth stage, the themes presented were identified, and, in the fifth, the principle of disseminated knowledge was identified providing the basis of the identified theme.18 The written contents (captions) were organized from the fourth and fifth stages of image analysis, that is, by recognizing the themes and the field of knowledge of each theme’s origin (principle of widespread knowledge). The imagetic contents analyzed were posted as “public” content on the social media and, therefore, can be analyzed by researchers interested in the topic without formal permission (as long as the anonymity of the authors of the posts is preserved).

The study was submitted and approved by the research ethics committee of the Regional University of Cariri under the opinion no. 2.958.837.

RESULTS

After organizing the data, categorization proceeded based on the principle of widespread knowledge. Two symbolic categories emerged: Care for sick preterm infants, with five posts, and Mother-preterm infant bond, with six posts. The analysis of the categories will be presented hereafter. Based on the denotative analysis, all posts were made up of photographs. In the connotative analysis, four posts consisted of images of people (infants) and one consisted of an object’s picture (an incubator). Details are presented below.

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<table>
<thead>
<tr>
<th>PHASES</th>
<th>POST 1</th>
<th>POST 2</th>
<th>POST 3</th>
<th>POST 4</th>
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</thead>
<tbody>
<tr>
<td>1. Selection of the textual corpus</td>
<td><img src="http://www.ufpe.br/revistaenfermagem/" alt="Image" /></td>
<td><img src="http://www.ufpe.br/revistaenfermagem/" alt="Image" /></td>
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<tr>
<td>2. Denotative analysis</td>
<td>Photography in the hospital environment</td>
<td>Photography in the hospital environment</td>
<td>Photography in the hospital environment</td>
<td>Photography in the hospital environment</td>
<td>Photography in the hospital environment</td>
</tr>
<tr>
<td>3. Connotative analysis</td>
<td>Image: Infant &quot;Our little one in one of the physiotherapy procedures at the hospital. How tiny! Mom's love.&quot;</td>
<td>Image: Infant &quot;(Infant's name) no longer had spots in her little arm that could handle so many punctures, then she had to get venipunctures on her scalp, as she had to take blood twice, using a catheter almost all the time she was there [at the NICU].&quot;</td>
<td>Image: Infant &quot;My #bebedelicia on phototherapy with a few days of life !!!&quot;</td>
<td>Image: Incubator &quot;When I was born, I was very white, my veins were apparent, and like 90% of preterm babies, I spent four days in phototherapy at the (name of the hospital) prolonged care unit.&quot;</td>
<td>Image: Infant &quot;Babies stay in the incubator and almost always in the same position, as there is a lot of wiring around the body (...). It is very sad to see our son like that; (I) cried every day.&quot;</td>
</tr>
<tr>
<td>4. Thematical analysis</td>
<td>- Hospital Physiotherapy Treatment</td>
<td>- Intravenous Therapy Care</td>
<td>- Premature infant care</td>
<td>- Premature infant care</td>
<td>- Maternal experience in the NICU</td>
</tr>
<tr>
<td>5. Widespread knowledge</td>
<td>Care for the sick infant</td>
<td>Care for the sick infant</td>
<td>Care for the sick infant</td>
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Figure 1. Results found in studies according to COSTA MRP, OLIVEIRA JD, DAMASCENO SS, SOUZA NKM, PALÁCIO MAV, 2021, Brazil, using image analysis. Crato (CE), Brazil, 2021. 

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Of the five posts, two covered maternal experiences in the NICU and addressed healthcare-related topics, of which one post obtained low engagement (25 likes) and another high engagement (1,044 likes - the highest number of likes of all posts analyzed).

The caption of the first post is presented below:

In this photo, you can see how the oximeter sensor looks like. It is often tight, uncomfortable, and leaves marks. Babies stay in the incubator and almost always in the same position, as there is a lot of wiring around the body. (Child’s name) had no free limbs – all of them had an attached device. It is very sad to see our son like that; (l) cried every day (Chart 1).

The post deals with the NICU experience and cite equipment used in this scenario (oximeter, incubator, and wires) and the impacts it triggered (constant crying) due to the environment, the equipment, and the child’s health condition.

As for the high engagement post, the following caption was posted:

(Child’s name) no longer had spots in her little arm that could handle so many punctures, then she had to get venipunctures on her scalp, as she had to take blood twice, using a catheter almost all the time she was there [at the NICU]. She was like that, with her hair shaved on both sides (a Mohawk) – a stylish baby. However, hair grows, and this is certainly the least of it. (Chart 1).

The content contains elements related to intravenous therapy (arm, puncture, veins, head, and catheter), blood transfusion ("taking blood"), trichotomy ("shaved hair"), hair care ("mohawk", "hair grows"), and mother’s coping with these procedures ("this is certainly the least of it").

In two other posts, family members posted content related to preterm infants' phototherapy care with 25 and 35 likes, obtaining low and high engagement, respectively, as shown in the following caption:

(...) I spent four days in phototherapy at the (name of the hospital) prolonged care unit. Phototherapy consists of the use of special lights as a form of treatment and is widely used in newborns who are born with jaundice, a yellowish tone on the skin, but which can also be useful to combat wrinkles and spots on the skin, in addition to diseases such as psoriasis and vitiligo eczema, for example (Chart 1).

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The contents published by family members refer to phototherapy, indicating the time of use ("4 days"), the health service (hospital), the concept ("use of special lights"), the sign or symptom ("jaundice", "yellowish skin tone"), and indications ("combating skin wrinkles and spots").

In the second category, six posts were found, whose principle of widespread knowledge found was "Mother-preterm infant bond". Based on the denotative analysis, photographs were found in all posts. In the connotative analysis, all posts included picture of people (infants) and in two of them the child and the mother were photographed, as shown below. After the Figure 2, excerpts from the captions with the highest number of likes are presented indicating that they achieved a high engagement.
<table>
<thead>
<tr>
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<td>Photography in the hospital environment</td>
</tr>
<tr>
<td>3. Connotative analysis</td>
<td>Person: mother and daughter</td>
<td>Person: infant</td>
<td>&quot;Two months of the purest and most sincere love. We were in the hospital, (child's name) was already breathing without a ventilator (breathing on her own).&quot;</td>
<td>Person: infant</td>
<td>&quot;Everything is different when it comes to preterm babies. When (child's name) was born, I could barely see her, as she was born very tiny, with a weak lung and had to go to the incubator soon.</td>
<td>Person: infant and mother</td>
</tr>
<tr>
<td>4. Thematical analysis</td>
<td>- Maternal experience in the NICU</td>
<td>- Maternal experience in the NICU</td>
<td>- Maternal experience in the NICU</td>
<td>- Maternal experience in the NICU</td>
<td>- Anthropometric data and gestational age</td>
<td>- Anthropometric data and gestational age</td>
</tr>
<tr>
<td></td>
<td>- Care for the seriously ill child</td>
<td>- Premature in the incubator</td>
<td>- Premature in the incubator</td>
<td>- Premature in the incubator</td>
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Figure 2. Results found in studies according to COSTA MRP, OLIVEIRA JD, DAMASCENO SS, SOUZA NKM, PALÁCIO MAV, 2021, Brazil, using image analysis. Crato (CE), Brazil, 2021.
Of the six posts in this category, five got good high engagement, and only one got low engagement. The most discussed topic (in three posts) was related to the "Maternal experience in the Neonatal Intensive Care Unit", of these, a post received 170 likes indicating a high engagement. The caption contains the following information:

* Everything is different when it comes to preterm babies. When (child's name) was born, I could barely see her, as she was born very tiny, with a weak lung and had to go to the incubator soon. After I recovered from the delivery, I went down to the NICU to see her and my contact with her was through that little glass house, and it was like that for several days. I couldn’t touch her because the risk of infection was very high, and after several and several days, I was finally able to hold her. This picture was when I first hold her in my arms, still so fragile and, at the same time, so strong. What an unique and indescribable feeling (Chart 19).

In the example above, one of the mothers pointed out that measures were taken preventing or hindering the bond with the premature daughter, such as the child's characteristic ("tiny"), the need for specialized service ("I went down to the NICU") and equipment ("had to go to the incubator soon"), and the impossibility of touching the daughter ("I couldn't touch her"). On the other hand, she pointed out other measures that enabled a bond's establishment (even a limited one) with her daughter, such as visiting the NICU, seeing the baby through the incubator, and holding the baby for the first time and photographing this moment.

This result shows that the mother-child bond was initially stablished in an expectant manner and, later, more physically and effectively (when the mother could hold her baby); that is, the mother moves from a passive and emotional attitude to a bodily and complete attitude. In the post presented above, the mother reinterpreted the immature lung as "weak" and the incubator as a "glass house", which means that the mother used individual strategies to get closer to the NICU's strange environment to create a bond with the daughter. In this sense, the language that the mother used to describe spaces and devices should be valued to create an atmosphere of welcome and humanization.

The second theme brought content related to "Anthropometric data and gestational age" and was composed of two posts, with high engagement, as they got 113 and 37 likes. In the first case, the caption had the following information:

* He was born at 30 weeks, weighing 1,355 kg and 39 cm (Post 21).

In the post above, the mother reported her son's anthropometric data, such as the gestational age (GA) the
child was born ("born at 30 weeks"), birth weight ("at 1,355kg"), and length ("39cm").

The second post had 37 likes and, with that, also achieved high engagement, with the following content:

And then, I was born. With 1,118kg and 37 cm. At 33 weeks of gestational age. I am a SGA preterm baby! (Post 22).

The contents presented dealt with the newborn preterm characteristics, such as weight, length, gestational age, prematurity, and birth weight.

**DISCUSSION**

The families reported care provided to the sick preterm infants in the posts through reports on intravenous therapy, blood transfusion, and trichotomy. Premature children often need to go through long periods of hospitalization due to the increased risk of developing diseases, as well, after discharge, they may need more specific care. These procedural actions impact families' perceptions during the child's stay in the NICU and, it seems, modulate their subjectivity as they experience the care provided. Therefore, families leave the real world to build a network of meanings in each phase of hospitalization.

In a study with mothers of children undergoing phototherapy, it was identified that the mothers reacted negatively to the information that their children needed this treatment, which included disappointment with the news, feeling of responsibility and insufficient support, re-signifying the maternal role, and looking for strategies to deal with the situation. Thus, the family's experience with the child in phototherapy is procedural, starting from negative aspects (refusal, impotence, and difficulties) moving to positive aspects (acceptance and use of strategies).

The care inherent in phototherapy can impair the family's involvement with the child, especially skin-to-skin contact and breastfeeding. Health professionals must offer support, guidance, and continuous encouragement to families to avoid such losses, involving the family members in healthcare actions.

Neonatal intensive care is an important tool in increasing high-risk infants' survival and effective action reduces the problems caused during hospitalization. However, conditions such as a high number of invasive procedures, continuous lack of light, noise, environmental factors, and excessive handling cause adverse effects that impact preterm infants' development.
The results show that maternal knowledge about phototherapy is consistent with the studies and that the mothers acknowledge the importance of this treatment based on the content posted. However, there is no need to specify whether, during hospitalization, mothers and other family members received specific guidelines on phototherapy. As this study is about content posted on social media, it is assumed that mothers/family members must have searched information in books, articles, or websites on topics they had contact with, as they exposed adequate scientific information. At the same time, it is important to note that these mothers used social media to disseminate important information about preterm care, which can serve as a source of information for other family members who experience a preterm birth.

From this, mothers recognized that preterm infants need comprehensive monitoring, considering that healthcare is essential to the infant's survival and that it impacts the infant's development.

The NICU environment and dynamics include different types of devices, equipment, and specialized professionals, which can alienate and frighten family members. Given this, health teams worldwide seek to develop actions that reduce these feelings through activities that encourage care, proximity, and interactions between parents and infants, supportive nursing care, and skin-to-skin contact.23

At the NICU, family members' concerns and expectations are diverse, and, therefore, the team must promote involvement with parents during the provision of health care, ensuring an effective communication with the mother and other family members. Family-centered care and a NICU environment capable of supporting the families is important to assist in creating the family-child bond. The mother-child bond is essential since the greater the bond, the better the care provided to the child after discharge.24

There are different effective education strategies aimed at parents of children in the NICU to improve knowledge and skills, such as educational group sessions, audios, videos, and bedside simulation. These activities are commonly performed by nurses, physicians, therapists, or managers, and include content such as breastfeeding, kangaroo care, preparing parents for the first visit, communicating, and sharing information, and discharge planning.25

Another study indicates that the relationship and approximation of the mothers of children admitted to the NICU with professionals bring benefits, such as reducing the negative impacts, reducing the levels of stress and anguish for mothers, and emphasizing the importance of an integrated and humanized multidisciplinary team that favors the communicative process.23
Thus, the attribute of the early mother/family-child relationship can amplify or mitigate the possible negative impact of the premature birth, especially in terms of development and growth, as the family faces a series of unexpected obstacles such as the risk of the child's death, the difficulty in skin-to-skin contact, the impasse of initiating an affective relationship between them and inadequacies in performing the maternal, paternal, and family role.

A study points out that the maternal bond with the premature child can be promoted through different methods, such as the flexibility of visits in the NICU, implementing the Kangaroo care from the NICU to the home environment, which, in turn, stimulates preterm infants' motor and cognitive growth and development, favors breastfeeding, strengthens the affective family-child relationship, allows parents greater participation in neonatal care, enhances parents' competence and confidence in caring for their child, and reduces the stress and pain of the premature birth.25

In this sense, the theory of attachment, developed by Bowlby, can be useful to understand how family members learn experiences and build the bond. The idea of bonding refers to the perception of trust and security, closely linked to the image of affection. In the mother-child relationship, this affective connection is determined in the first 24 months of the child's life and is a consequence of the immutable relationships preserved between them from birth.26

The term "preterm" has been increasingly used, as it encompasses the clinical manifestations of multiple organs' immaturity. However, the most widely used term is "prematurity" as shown in the present study. Prematurity is categorized into three stages based on the gestational age, as follows: extremely preterm is the baby born with less than 28 weeks, very preterm is the baby born between 28 and 32 weeks, and moderate to late preterm is the baby born between 32 and 37 weeks.22

Thus, a preterm birth is not a single entity but the outcome of multiple determinants. The process that results in the birth of a preterm baby begins in pregnancy, in a continuous course, based on preconception and gestational risk conditions, with possible repercussions in the child and family's lives.7

The child mentioned in the post is classified as a very preterm, with gestational age at birth between 28 weeks and zero days to 31 weeks and six days. Such stage of prematurity has a high risk of adverse outcomes and neonatal mortality, compared with, for example, moderate preterm. It is emphasized that prematurity has occupied the first place in the causes of deaths in the first five years of life, since the 1990s.1, 22, 27

The study findings show that the mothers recognized that the preterm infant has specificities different from
those born at term, such as weight and length, and, therefore, they need specific care. Thus, the importance of monitoring these children throughout their development is highlighted, especially in the first months of life, a period in which they are expected to reach the milestones of term children.

It can be observed that part of the risk factors related to this diagnosis is closely related to prematurity, which is also a related factor. This information is essential to reinforce nurses' role in promoting the parent-preterm infant bond since by identifying the risk factors and working on them, nurses can prevent the bond from breaking.28

In the posts presented, only one mother cited a more specific classification (SGA). The use of specific terms is part of the professionals' language and can be learned by family members during hospitalization and/or after receiving guidance from professionals or searching the internet. Such classifications are useful and can predict the prognosis, evolution, and response of the premature infant to pharmacological and non-pharmacological treatments.29 This type of information can be passed on to parents through educational materials or on social media, for example, as information about the child.

CONCLUSION

The use of image analysis helped to understand how the investigated social media constituted itself as an important dialogue tool since it provides real-time interactivity with a large audience, in addition to showing the competence of existing communication through images. As a result, social media is a means of carrying out health education practices, especially in the current reality, when these occupy more and more space in society's routine. Therefore, it is essential to use social media to support educational process to overcome the remaining difficulties, such as the lack of resources, to reach a large number of people.

In this context, the study contributes to nursing care practices guiding nurses on the best tools to be used to disseminate information. Social media can be used, for example, to increase awareness, and, consequently, to reach a wide audience. Concerning teaching, the study can point to social media that contain written and imagetic contents that can be used in research, discussions, and classroom analysis on prematurity-related topics. Concerning research, the study pointed out that social media can be understood as a locus of study to understand, in a more systematic way, how family members use them, what written and imagetic contents they share, and what generates more engagement among family members.
Among the study's limitations, there is the absence of analysis of the comments in each post since only the caption of each post was analyzed and not the subsequent comments. Another restriction is that the hashtags were not analyzed separately (which would characterize hashtag analysis, another modality of studies in social media). Therefore, it was not possible to identify which ones managed to generate more engagement among the users. Finally, another limitation was that the researchers analyzed the engagement of family members of preterm infants only on social media and from a single hashtag. These limitations, therefore, point to new possibilities for future research.

We emphasize the need to conduct further studies on the role of social media in the face of prematurity, preterm infants, and/or family care for preterm infants to understand which content parents and family share in the virtual environment and how people produce, share, engage and disseminate content on the prematurity topic.

**CONTRIBUTIONS**

All authors contributed equally in the design of the research project, data collection, analysis and discussion, writing, critical review of the manuscript's content with intellectual contribution, and approval of the final version of the study.

**CONFLICT OF INTERESTS**

Nothing to declare.

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