

Health education as a strategy to promote the development of the prematurely born child: perception of caregivers

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ABSTRACT

The birth of a premature baby can cause impairment in the child's development, requiring a critical analysis from the health professional of their performance in the care directed to this public and their family. There is lack of scientific literature focused on the promotion of functional development of premature infants, making necessary the use of technologies that help the family in home care. Objective: To understand the knowledge and practices of caregivers of prematurely children, about the functional development mediated by an intervention with an educational technology. This was a qualitative, descriptive, exploratory and intervention research, with 11 mothers of prematurely born children, followed up by a service in a city of Minas Gerais. Performed in three steps. The first still in the follow up service, the second and third consisted of home visits. The analysis originated the categories "Expectations related to the educational material", "Experiences with the educational material" and "Changes in care aroused by the appropriation of the educational material". The work of the health educator articulated with an educational technology focused on promoting the child development of premature children contributes to the resignification of knowledge and everyday practices of care directed to this public.

Keywords: Health Education; Child Development; Caregivers; Educational Technology

1 INTRODUCTION

The birth of a baby before the recommended time is considered when pregnancy ends before the 37th week, thus called preterm newborns (PTNB). Commonly, this fact can cause impairment in the development, mainly due to possible complications that can often occur during hospitalization. Concerning prematurity, hospital care often occurs in the scenario of Neonatal Intensive Care Units (NICUs), where the monitoring of the development of preterm infants becomes essential (RIBEIRO *et al.*, 2017).

Meeting the family and the community in which the child is inserted is important for all health professionals, because the child will grow within this context. Therefore, working in partnership with the family unit is fundamental to act in promotion and monitoring of the development of the NB, in addition to their insertion in this context (BRAZIL, 2013).

Educational strategies of lower cost and greater effectiveness constitute power tools for promoting the development of prematurely born infants, providing a better quality of life for both babies and parents after discharge from the NICU (LEMOS; VERÍSSIMO, 2015). Mothers of premature babies feel the need for a printed material about care with pre-term babies, which can assist them in their daily life. Such materials constitute technologies that assist in the continuity of care after discharge from the hospital, providing them with useful and safe information (SANCHEZ; LEMOS; VERISSIMO, 2017).

Educational technologies represent a tool that contributes to a more participatory approach to education, being a material for consultation by its intended population, reinforcing their autonomy and empowerment. Work processes centered on soft (guided by relations between subjects) and soft-hard technologies (guided by epidemiology or pedagogy to establish these relations, in which printed educational materials are inserted), are able to constitute a new care logic (SILVA *et al.*, 2018; FRANCO, 2013).

The home visits (HVs) become, in this context, essential, understood as part of a thorough investigation of the ways of life of the subject. This allows for a qualified listening, the formation of a bond between the educator, learner and reception between them, as an interface for dialog among health professionals, the individual receiving the care and their family. The HV allows researchers to know the social context and the needs of families, approaching their health-disease process (ALMEIDA-SILVA, 2019; SANTOS *et al.*, 2017).

The scientific literature focused on the promotion of functional development of prematurely born children is scarce, having as an intervention focus their caregivers. Based on this premise, and adding to the effect of hospitalization in NICU of a PTNB on parents, it is necessary to use technologies that can assist the family in the care with those children (LEMOS; VERÍSSIMO, 2016).

In this perspective, there was the construction of the educational material: "Sofia's History: Battles and Conquests of the family in the care and development of Prematurely Born Children". It is an educational guide used in the present study, whose goal is to contribute to building practices for promoting the development of prematurely born children during the home care.

It was built under the logic of Popular Health Education, which aims to narrow the gap between health services and the population. Its basis is to potentiate the human relations in the teaching-learning process, oriented in the emancipatory educational and social work process. It promotes the empowerment of people, in a dialogic relationship between the popular and scientific knowledge (MACIAZEKI-GOMES *et al.*, 2016).

Sofia's History was elaborated in a participatory way, with families and professionals who address the functional development during the first years of life, being an instrument of support for families in the promotion of the development of prematurely born infants, as well as for the professionals that assist them (LEMOS; VERÍSSIMO, 2016).

Considering the purpose of creating “Sofia’s History” and the importance of the role of the health educator in this context, there becomes relevant to accomplish this research, which focuses on understanding the knowledge and practices of caregivers of prematurely born children about their functional development from an educative intervention mediated by a technology: the material “Sofia’s History”.

Considering the recurrence of premature birth, the repercussion of this fact for the family, for the health system and for the child itself, as well as the importance of connecting the parents to educational technologies to promote the development of preterm infants, the following question guided the research: How can an educational technology assist in knowledge and practices of caregivers for promoting the development of prematurely born children?

Thus, this research aims to understand the knowledge and practices of caregivers of prematurely born children about the functional development mediated by an intervention with an educational technology.

2 METHODOLOGY

This is a qualitative, descriptive, exploratory and intervention research. The intervention-research constitutes a research trend called participatory, which aims at the participation of certain social groups seeking solutions to the problems experienced, involving a process of understanding and change of reality (OLIVEIRA; OLIVEIRA, 1986).

The initial research scenario was the reference service for monitoring and care with prematurely born infants, in a city in countryside of Minas Gerais, which meets infants discharged from the NICU of the municipality in which it is inserted and the entire health microregion in which it is inscribed as a mid- and high complexity care reference. It is a multidisciplinary service, which performs

approximately 12 weekly visits and chosen for being the only service in the region that meets the population of interest in the study.

In this scenario, the researcher approached the caregivers of children followed-up by this service, considering the following inclusion criteria: their children were born with any level of prematurity, until the six months of chronological age, provided they had no sequelae of serious complications - such as anoxia, congenital malformations or chromosomal alterations that could affect the development and care offered by the family. There was inclusion of literate caregivers without cognitive and mental impairment that could hamper their participation in the researcher's perspective.

The participants were 11 caregivers of prematurely born children, who were approached in three distinct stages by the researcher.

The first step occurred in the aforementioned reference service in June 2017, and aimed to perform an individual interview with open questions, related to prematurity, feelings during the hospitalization of the child in a NICU and at discharge to home, the concerns in home care and their child's support network. At this time, the participants signed the Informed Consent Form, receiving information on the study objective and on their participation in the same.

On the occasion, the educational material "Sofia's History: Battles and Conquests of the family in the care and development of Prematurely Born Children" was made available for the caregivers (LEMOS; VERÍSSIMO, 2016), allowing for the agreement in the possibility to participate in the second stage of the research, and its scheduling through telephone contact.

The second stage consisted of a home visit performed in a period of approximate 45 days after the first stage, between the months of August and September 2017, on days and times chosen by the participants, who were 13 caregivers at this research stage. On this occasion, a single educational activity was performed with the caregiver, using a methodological strategy that aimed to

identify their real approach to the educational technology distributed in the first step. In this perspective, there was a dynamic of myths and truths of prematurity, guided by issues related to knowledge and care practices that can be operated from the educational material used in the study.

Considering the caregivers' answers, the researcher explained and talked about the same. Finally, the researcher built a series album, with images that appeared in the book "Sofia's History", delivering it to the caregivers, who individually analyzed the images for as long as they needed to, and chose the three most significant images for them, considering their experiences in the care with their premature child.

The third step occurred in a period of approximate 45 days after the second stage, between the months of September to November 2017, also in the home context. It was marked by a bond already established between the researcher and the participants and by perceptions and data collected in the previous steps. On this occasion, there was an open semi-structured interview, containing questions related to the axes worked by the educational material "Sofia's History", in order to understand the knowledge and practice of care with the prematurely born child from the reading and intervention of the researcher with the educational technology in the second stage.

The questions focused on expectations that emerged when receiving the didactic material, on the experience of reading (in relation to the interaction with people and listening to advices), on the contribution of the guide to stimulating the premature child's development, on the support of the professionals and family in the care with the baby, in addition to preparing the environment for the child's development. The results presented in this manuscript refer to the third phase of the study.

The participants were identified by the letter C of caregiver, followed by the number corresponding to the order in which they were interviewed, namely: C1 - C11.

The data were analyzed according to the content analysis technique of Lawrence Bardin, composed of the following steps: (1) pre-analysis, (2) material exploration, (3) treatment of the results obtained, and (4) interpretation. Such steps are a method of organization and analysis of the statements, initiated through a repeated and careful reading of the transcriptions of the interviews carried out. Then, the most significant passages were defined, according to the study objectives, for the subsequent elaboration of the categories, a construct that highlights the convergence of significant aspects that emerged from the participants' statements. The treatment of the results and their interpretation was then performed for the elucidation of the underlying content expressed in the deponents' speeches, added to its connection with the literature related to the topic under study (BARDIN, 2016).

The ethical precepts were considered, and the data collection started after a favorable opinion from the Human Research Ethics Committee at the Federal University of Viçosa (UFV), registered under n. 2.058.818/ CAAE 67955717.5.0000.5153.

3 RESULTS

3.1 Characterization of Participants

Of the 11 participants, five have Complete Secondary Education, three College or higher, two Complete Basic Education and one, Incomplete Basic Education. Most of them belong to the socioeconomic levels C1 and C2, according to the Brazilian economic classification criterion - Brazilian Association of Research Companies (ABEP, 2016). All participants lived with a partner, six of them had only one child and the remaining five, two children each. In relation to prematurity, three were caregivers of Very Preterm Infants (28 - 32 weeks) and eight, of Moderate to Late Preterm Infants (32 - 37 weeks), based on the classification of the World Health Organization (WHO, 2017).

The interviews allowed for the construction of three categories, which allowed for identifying the knowledge and practices of caregivers of prematurely born children, mediated by an educational technology: "Expectations related to the educational material", "Experiences with the educational material" and "Changes in care aroused by the appropriation of the educational material". Importantly, the second category has the following subcategories "Recognition of experiences and easy to understand"; "Promoter of safe care with the child"; "Aid in the understanding about the importance of monitoring the child". The third category had as subcategories "Ability to recognize the process of development of the child" and "Promotion of changes in the everyday life of the child".

3.2 Expectations related to the educational material

The expectations of caregivers related to the possibility that the material would contribute with information related to the prematurely born child, which, until then, the caregivers mentioned not having:

I thought, I hope there is enough information for me. So I can understand better what happens with my daughter. Because we think: Yay! There's something for me, to enlighten me. C4

I was curious to see what was written. I thought it could help me, also bringing information we don't know. C7

I thought: now I'm going to be able to know a little bit more of this reality, have actual information of what truly means to have a premature baby. C8

I thought a help is coming, something that could get me updated. I was still a bit lost when the book arrived. C9

Another expectation related to the fact that the information would excessively base on scientific materials, as well as the reproduction of the information found on the internet:

I thought at first that it would be a book with things written as on the internet.

C1

I thought: should I read the entire book? I thought it would be more scientific, with a more difficult language. C6

3.3 Experiences with the educational material

The caregiver's encounter with the content expressed by the educational material allowed them to reframe the expectations related to it. Such expectations may be expressed in the subcategories "Recognition of experiences and easy to understand"; "Promoter of safe care with the child"; "Aid in the understanding about the importance of monitoring the child".

3.4 Recognition of experiences and easy to understand

The experience of caregivers with educational material allowed them to identify with the experiences reported in the material:

I found it very good because it's a book with information, it's small, but brings so many things we experience. It's a book with reports, with an illustration of a family that lives what we live. I've identified with some things I was going through at the time. C1

(...) in the booklet, (...) I could see that other people go through the same things as I do. C2

I really enjoyed reading it, I found interesting because most things people mention experiencing in the stories, we've already gone through (...). C3

Furthermore, they considered the educational material easy to read, with simple, didactic language and illustrations that facilitated the process of appropriation of the content by the caregiver:

But the book is really interesting, it's easy to read, very has a lot of images, which facilitate a fast reading. It's very didactic and with a very simple language. C3

The letter, images, it was great, I read it in a day. I've already reread it several times. C4

I read it in the first week you gave me, and quickly. I've reread, felt the need to come back for a few things. Its language is very easy, so it's nice to read. It's a little story indeed, a contribution of everyday life. C8

In one day, I was in the bed, and they were by my side, sleeping, I managed to read. I managed to read fast, even with the girls, because it's very small and easy to understand. C11

3.5 Promoter of safe care with the child

The material was important to provide safety and strengthen the self-confidence of the caregiver in the daily care with the premature child, also helping them in the refusal of unwanted and unfounded advices:

I'm not that kind that follows what other people say. I don't have anyone to rely on, the material is the closest thing I have to rely on, the easier is the booklet. C1

It helped me be sure of what I was doing. That's why I liked the book, because if the person talks too much, I show her the book, it's a way to demonstrate what I am talking about. C2

The book helped me (...), because I feel more secure. It gave me more safety to refuse the advice, I feel calmer. C4

I listen to other people's advices, but I'm not all ears. (...) It's helped me become more secure. C5

Everyone wants to give opinion and we get confused. And the material made me feel more secure about this. C6

I already knew many things were a lie, there are many myths. Even by my graduation (nutritionist). I felt the need to have something to prove, for my mother and my husband, especially in relation to development. C8

Reading the booklet helped me separate the advices I can hear and those I cannot. I was very insecure, so afraid. This helped me become more secure. C11

3.6 Aid in the understanding about the importance of monitoring the child

The caregivers reported that the educational material strengthened the importance of the multiprofessional follow-up of their children to promote their proper development:

I understand better the importance of the visits, I don't think if he really needs that follow-up, I see he needs that. C1

It helped, because until then, I used to wonder if it was really necessary to take her to the service. When I read the book, I became interested in being there, taking her to the physiotherapist, nutritionist. C4

I was already concerned about not missing the appointments. I used to find it stupid to take her to the doctor up there, if we had a doctor here in the FHP, but then I realized that it's more specific and important. C5

I couldn't have imagined that he would need a nutritionist, physiotherapist, social worker. C8

I was already concerned about not missing the appointments, to be on time. But with the booklet, this issue redoubled. C9

3.7 Changes in care aroused by the appropriation of the educational material

Considering their experiences with the educational material linked to the presence of the health educator in this process, the participants demonstrated the

promotion of changes in daily care with prematurely born children, expressed in the subcategories "Ability to recognize the process of development of the child" and "Promotion of changes in the everyday life of the child".

3.8 Ability to recognize the process of development of the child

The caregivers reported that the educational material gave them the ability to recognize predictive signs of the development of their child, making them more attentive in this process:

I paid more attention to the positive signs, but I already associate the negative signs. I keep looking at his development and check the calendar to see what he can do. C1

The book helped me, because when he was born, we were worried about everything and it contains the signals, explaining what I need to observe on him. C2

Even before the child's action, you already know what they can do and you become more attentive, and when the child does it, you realize it fast. C3

I was unaware of those negative signals. With that, I began to observe more her. So, when I read the book, I already feel more secure, some things in it I observe faster. C4

I see the change in the way she plays, I see she's able to bring her both feet to the mouth, takes the toys from hand to the other. And in that moment I see that everything is right, everything is normal. C6

I observe more. He already makes different sounds with the mouth, grab things and already turns. C7

I've noticed that everything is in her time, that I cannot demand that she do what other person's baby is doing. Help me pay more attention in her movements. C9

My baby is not so able to hold things with his hands. He's still not that stable. I remember these images from the book. It's important to note these things at the baby to know if everything is normal. C10

3.9 Promotion of changes in the everyday life of the child

The knowledge about the child's development process makes caregivers change the environment, the choice of toys that can stimulate the child and in their process of socialization:

The toys I give him help me leave him playing alone while I do other things, and this helps stimulate him. Depending on the toy you buy, if it makes a noise, it helps stimulate the baby. C2

She was getting a toy and the person asked me to choose it. She suggested a doll and I asked to take a little bee instead, which has light, noise, music, and I said that was more suitable for her age and would stimulate her more, draw her attention. C3

I left her playing in the room with the toys. Then, I had the idea to buy this EVA carpet, full of letters and put on the room's floor with the toys. C4

Her father is more worried about buying toys that draw her attention, encourage her at this moment she's learning to crawl. C5

Today, the book showed us he can go to nursery, that he can socialize, we asked if they would stimulate him or if he would only watch television. We need to stop the overprotection. C8

When I buy her a toy, I think about how it can help stimulate her to grab, tighten. After the book, I understand that I need to let her be, freer to play. C9.

4 DISCUSSION

The findings of the present study initially expose what is expected from an educational material from the perspective of those who access the routine of health services. In this sense, the role of the information contained in these materials assumes primacy in the representation of the study participants when asked about their expectations related to the material "Sofia's History".

The literature affirms that health education is not only a strategy to provide information to individuals and collectives, but above all, a key to share knowledge and practices associated with values such as health promotion, solidarity, participation and quality of life (GUERIN *et al.*, 2017).

The educational technologies are, in this context, important tools for the performance of the educational work and the care process. The use of these technologies contemplates the existence of an object of dynamic work, in continuous motion, not static, passive or reduced to a physical body anymore. This object requires health professionals a differentiated ability to use these technologies, in order to realize this dynamism and plurality, which challenge the subject to the creativity and flexibility (RODRIGUES *et al.*, 2017).

The production of educational materials have been used to work various themes in the health field, emerging the need for studies that may bring evidence about its appropriation and use by the intended public. The importance of educational materials in the teaching-learning processes and health promotion makes us think over the implications of their use by the target population (PAIVA, 2017).

In the present study, the educational material proposed to assist caregivers of prematurely born children, in relation to promoting the child development. When experiencing the content expressed in the educational technology "Sofia's History" caregivers transcended the expectations raised before approaching it. In this sense, they attributed to the material the ability to guide the care with the

prematurely born child, with information that goes beyond that found on internet sources and that is not tied to a scientific language, also not being one more reproduction of what is on the internet.

The literature postulates that, in fact, educational materials should be tools of health education able to generate teaching-learning possibilities, through the interaction between family and child, aiming to promote positive advances in child development. They are instruments that facilitate the educational process, allow the reader to strengthen information and discussions from other means, serving as a guide for a more assertive decision-making (SILVA, 2017).

Considering the participants' expectations in relation to the educational technology of being just an informational material, the subsequent contact with it allowed the caregivers to recognize their experiences reported in the book "Sofia's History", accessing the reality counted by the identification of experiences common to families of premature babies.

A study performed with a support group for parents of premature babies showed that the exchange of experiences allows families to identify with similar experiences and realize that they are not the only ones to experience them. Learning and reflecting on the experience of other families become make them feel calmer and safer concerning their particular experiences, favoring their interactions with the professionals who meet their children (BALBINO *et al.*, 2015).

This study also revealed the easy understanding made possible by the reading of the material, considered by caregivers as an aspect that collaborated in the appropriation of the guide's content.

Such findings corroborate the literature, which asserts that the construction of educational materials requires carefully selecting the most relevant information that must appear on the instrument, preceded by extensive literature review, with clear definitions of the goals to be achieved by the intended population. In this way,

they must be attractive, accessible and clear, meaningful, presenting vocabulary consistent with the message and intended population (MENDEZ; SÁ *et al.*, 2017).

In this sense, they must have accessible language, since the lower the complexity in writing, the greater the probability of being read by the intended population. Even with an arsenal of available printed or digital documents, there is a gap in knowledge about the quantity and especially the quality of educational materials for children with diseases or risks to neuropsychomotor development (SILVA, 2017), which shows that the educational material used in the present study contributes to reducing this gap.

The book “Sofia’s History” also brought safety to the caregivers in relation to decision-making, to the care with the baby and the refusal of inadequate advices, strengthening the confidence to discern what would be positive or negative in everyday care. Many caregivers pointed out that such material also helped them verify that the care provided to their children were adequate for their development process.

In fact, the literature indicates that the transition from hospital to home is a process that involves feelings of insecurity in the caregiver, who will assume the care with a child who went through a long period of hospitalization. In this sense, the care with the premature child requires a critical attention to caregivers, to ensure a safe care and an adaptation to the particularities of prematurity (BRAGA; SENA, 2017). The present investigation allowed identifying this intention through the actions of health education focused on this population.

The family support has a significant role in the adaptation of the mother to changes and acquisition of confidence in the care. The experience transmitted by previous generations (parents, grandparents, uncles, etc.) represents a strong support, and may decrease the feeling of insecurity experienced by the caregiver. (ALCÂNTARA *et al.*, 2017). Nevertheless, the participants’ speeches also show that the family/social context can bring influences that hinder the right decision-making

in the care with the child, which reiterates the contribution of the educational material “Sofia’s History” in this context.

The experience with the “Sofia’s History” also brought the strengthening of the importance of the child’s follow-up by the service in which they are inserted. The literature shows that the presence of morbidities requires an adequate follow-up after hospital discharge from the NICU. This should happen in a structured way, in order to know the profile of newborns who survive in the ICU and better assist them, establishing a planning of early intervention. The organization of outpatient follow-up requires a teamwork, with well-established roles of each member (SBP, 2012).

Some caregivers of the present study were unaware of the importance of monitoring of different professionals (physicians, nurses, nutritionists, social worker, physiotherapist) and believed that the visits to the pediatrician would be sufficient for the adequate monitoring of their child. Others began to understand the importance of follow-up in specialized services, considering the particularities in the development of a prematurely born child.

The preterm infants have an increased risk of presenting changes in growth and psychomotor development in childhood, being necessary to intensify the care to organic and interactional problems of the baby. The reasons why it is important to monitor them in specialized services, with a multidisciplinary team, include the early perception of changes in development, the identification of risk factors for the damages, the identification of psychological and emotional problems in children or in the family and the guidance of parents on the care with their children. Factors such as gestational age, birth weight, occurrence and severity of diseases, complications occurred in Neonatal ICU are considered follow-up criteria (KLOSSOSWSKI *et al.*, 2012).

The follow-up outpatient clinics should be prepared to send to specialized services, detect possible factors that may interfere in the development and help

overcoming the difficulties of the child, caregivers and other family members (BRAZIL, 2013).

Families also need information on health, growth and development of their children, in addition to knowing if other problems will be found in the future. Concerns at points of transition often arise, such as joining the daycare or changing educational levels, careful guidance and advice (KLOSSOSWSKI *et al.*, 2016), situations in which the educational intervention can help caregivers, as evidenced in the present study.

After the processing of all experiences with the appropriation of educational material, the interviewees' statements revealed that the care practice suffered changes. Initially, a view change, enabling them to understand the development of premature child with repercussion in their attitudes for the promotion of this development on a day-to-day basis. In this sense, there is an evident change of perspective of the caregiver, generating changes of the practice of stimulation and empowerment of the family in the care with premature babies from the reading of the "Sofia's History".

In fact, Health Education must contribute to recognizing the health as a process of collective construction and of the subjects involved as authors of their own history. It is not only transfer of information, but can also contribute to emphasizing the social participation of users and produce critical knowledge of the reality. It highlights the dialog as the central axis of the educational process and puts popular health education as an instrument to break with the traditional educational model. Without the existence of an educational process, health would hardly be problem solving, or become a tangible means that has a social character as important as the scientific (SANTOS *et al.*, 2017).

The changes of caregivers in their care perceptions and practices refer to the real possibility of dialog established between the material "Sofia's History" and the everyday life of those who experience the care with prematurely born children.

In the care with a premature baby, it is essential to empower and share with the family the care responsibility for the development. Thus, the use of reference of popular health education in the construction of the printed educational material used in the present study refers to the importance of empowering the caregivers in the role of the child development, associated with the support of health educators and follow-up services focused on this population (MACIAZEKI-GOMES *et al.*, 2016).

In this sense, Popular Health Education is able to contribute with methodologies, technologies and knowledge in the construction of new knowledge and practices. The theoretical referential of Paulo Freire brings a methodology based on liberation from oppression as a way of achieving an emancipatory process, mediated by dialog. It clarifies the educational process through culture, considered guiding axis in the process of awareness of educators and learners. In this way, it understands the subject as participative and agent of the transformation of their own history, building autonomous and capable beings (BRASIL *et al.*, 2017; BEISIEGEL, 2018).

Popular Health Education is based on the reflection on the practices of health education in services and the formulation of propositions, with possibilities of changing such practices. It promotes the appropriation of the meaning of health as a right of the population and citizenship. In a dialogical, emancipatory, participatory and creative perspective that contributes to the user's autonomy (BRASIL, 2007).

Such autonomy was perceived in the participants' speeches when bringing examples of changes in the home environment and in the choice of toys aiming to better stimulate the baby's development.

Popular Education also allows incorporating aspects of the individuals' subjectivity, offering the opportunity to intensify collective and innovative constructions and experiences of the traditional educational model. In this sense,

individuals must be respected, with their knowledge and ideas incorporated in the new knowledge built, placing them as a critical and thinking active subject with the right to express themselves, create, analyze and discuss (DIAS *et al.*, 2018).

The present study brings the power of Popular Health Education through the educational material "Sofia's History", empowering mothers in the care process of their prematurely born children. It considers that the life world of those who experience "having a prematurely born child" and those who take care of prematurely born children (accessed in the material confection) has strengthened the recognition of care experiences expressed in the educational material, dialoguing with the worlds that intersect and facilitate the understanding, appropriation and incorporation of the read content and, mainly, experienced.

In this respect, the educational material constitutes a pedagogical tool that enables the mediation in the educational process of subjects. To this end, the production of an educational material must be an area of shared construction of knowledge between subjects. In this way, this construction should be guided in the relationship between the different types of knowledge (educator and learner), in the methodological rigor and critical reflection about the practice, through dialog and cooperation, based on Popular Education (CARVALHO, 2007).

In this context, there stands out the role of the health educator, who should act as a facilitator of this process. During all stages of the development of this research, the researcher assumed the role of health educator, using methodological strategies to create bonds with the research participants, promoting a horizontal and trustful relationship between the researcher and the caregivers, in order to encourage them to read and retain the material content.

This corroborates what the literature shows as the role of the health educator, when perceiving the reality surrounding them. Health education, understood in this sense under a dialogical perspective, stands out as an essential tool in the care process of the premature baby, since it gives parents greater safety

and ability to develop the care to their child (GUERIN *et al.*, 2017; RIBEIRO *et al.*, 2015).

Therefore, such dialogic relationship developed between the researcher/educator and the participants in the study was important to understand the peculiarities of the daily care with prematurely born children, reinforcing that the educational material should be associated with the work of the health educator, in order to intensify the transformation and the construction of the praxis desired by the educational action.

This research presents as a limitation the fact of being accomplished in a particular reality. Studies conducted in other contexts may differ from its findings, thus not making the generalization of the results viable. Furthermore, another limitation may be the convenience sample, with families who attend a multidisciplinary follow-up service to preterm infants, since they are more sensitized to using educational materials, which affects the findings of this research.

5 CONCLUSIONS

The findings of this study show that the work of a health educator mediated by an educational technology focused on the promotion of child development of premature children contributes to the resignification of knowledge and everyday care practices to these persons. Its contribution refers to the need to review the performance of health professionals in the practices of health education, reaffirming the need to associate the educational material to the presence of the educator and not only the delivery and disclosure of a material.

In this sense, the health education should enhance the training of health educators who consider and base on popular health education as emancipatory practice able to generate autonomy in care, not only for its intended public, but for all users of the Unified Health System.

Moreover, this study highlights the importance of continuing education of professionals that work in health and are in contact with the reality of caregivers of prematurely born children. In this context, there stands out the role of Primary Health Care and the actors involved in this scenario, in order to strengthen the actions in health education and care provided to families of prematurely born children.

While prospects for future studies, the present research suggests further investigations using educational technology in other contexts, as well as other educational technologies focused on caregivers of prematurely born children, in order to aggregate scientific evidence that legitimizes health education as a transformative tool of health care.

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