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Care-educational technology in website format for family members and caregivers of children with congenital heart disease after surgical discharge

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1 INTRODUCTION

Congenital heart defects (CHD) are abnormalities affecting the heart and great vessels, which are responsible for important functions in live births. CHD can be clinically divided into cyanotic and acyanotic, which indicate the presence or absence of bluish coloration of the skin and mucous membranes due to oxygen deficit in the blood (BELO, 2016).

Among the various existing cardiac malformations, CHDs have an impact on children's lives, morbidity and mortality and increased spending on public or private health services. They are part of the major cause of death among cardiac malformations in the first year of life, representing about 2 to 3% of neonatal deaths and an important cause of mortality (CAPPELLESSO, 2017).

In Brazil, according to the Brazilian Society of Cardiology (SBC, 2015), 28.9 thousand children are born with congenital heart disease per year (1% of the total), i.e. every 100 babies born alive, one has heart disease. It is estimated that 80% (23,800) need surgery, half in the first year of life. But unfortunately, about 78% (18,000) do not receive treatment, mainly due to lack of diagnosis or places in hospitals in the public health network (SBC, 2015).

Comprehensive care for children with heart disease in Brazil is one of the greatest challenges of the Unified Health System (SUS), mainly due to the country's continental dimensions, uneven geographical distribution of pediatric cardiac surgery and cardiology reference centers, as well as the absence of specialized services in some states. About 49% of accredited services do not meet the minimum number of pediatric congenital heart surgeries provided for in Ordinance SAS/MS No. 210/2004 (BRASIL, 2017).

In order to ensure better effectiveness and greater access of children with congenital heart disease to the SUS care network, the Ministry of Health (MS) has established the "Plan to Expand the Care of Children with Congenital Heart Disease". The plan has as national guidelines, to implement the organization of care for children with CHD in the SUS; expand the supply of pediatric cardiovascular surgery; and recomposition of the values of pediatric cardiovascular procedures. This plan executes the joint work of the MS, National Institute of Cardiology (INC), Brazilian Society of Cardiovascular Surgery (BSCVS) and Heart Institute (INCOR) (BRASIL, 2017).

Ordinance GM/MS No. 1,169, of June 15, 2004, which instituted the National Policy for High Complexity Cardiovascular Care, provides for the need to organize and implement assistance based on the principles of universality and integrality of health actions, through hierarchical and regionalized services, multiprofessional teams, techniques and specific therapeutic methods, focusing on the good performance of health care (BRASIL, 2017).

The care parameters of the line of care are periodically monitored by the Ministry of Health. In this context, it is necessary that the qualified units offer high complexity procedures, outpatient, preoperative and postoperative follow-up, as well as emergency care. CHDs are the malformations with the greatest impact on infant morbidity and mortality, as well as on public health costs (GRASSI; SAMPAIO, 2022).

In the Northern Region, pediatric cardiovascular surgeries performed by SUS are carried out in hospitals qualified as reference in the line of care of high cardiovascular complexity. There are three of these in the North Region, one in the state of Amazonas and two in the state of Pará. In Amazonas, the service qualified in pediatric cardiovascular surgery is the Francisca Mendes University Hospital, located in the city of Manaus. The hospital has the most qualified nursing team in the state of Amazonas for in-hospital care in heart disease in general.

It should be noted, however, that not only diagnosis and treatment of the clinical condition are important. Health professionals should also look at the child's family. When a child is diagnosed with CHD, at birth or later, parents experience feelings of anxiety and fear, either because of the treatment or the possibility of the child's death. It is based on this principle that it is important to build a technological care-educational tool (TCE) that contributes to the realization of care after hospital discharge of children with CHD who have undergone cardiac surgery.

ECTs are increasingly used as strategies that allow the enhancement of health education, since they provide greater approximation with the proposed theme. In addition to enabling the active participation of people in the real assimilation of knowledge (SILVA *et al*., 2018).

Thus, technological developments can be a great ally of health education. The creation of technologies, such as applications *(App's), software,* has become one of the favorable factors for health education, contributing to the implementation of health promotion strategies and improving the quality of life. Artificial intelligence, for example, enables the reduction of rework, and provides greater assertiveness in the processes, becoming an ally of professionals, who seek to master these new technologies (MENDONÇA *et al*., 2017).

Thus, it must be considered that the changes that have occurred in the world, due to communication via the internet, have brought changes to the whole society, enabling the creation of multiple technologies. These new technologies make people's lives easier and, as technologies advance, new forms become popular making it more accessible and facilitating people's daily lives (MENDONÇA *et al.*, 2017). Internet access has become part of the population's routine, allowing to improve the coping with health problems in a simpler and faster way (LIMA *et al*., 2021).

The integration of information technology with health research promotes technological solutions that support clinical decision-making, interactions and qualified therapeutic conduct (CRUZ *et al.*, 2020). Such technologies provide strategies in educational practice. For example, audiovisual media that provide new ways of interacting and living together (BENTO; MODENA; CABRAL, 2018). According to Cardoso *et al.* (2019), the use of educational technologies as methodological strategies, in tactile and auditory, expository, dialogical, printed and audiovisual modalities, enhances the orientation of care in the community, knowledge construction, empowerment, self-care and prevention.

Educational technologies in health use tools for the development of health education, with the objective of favoring the care process of individuals, comprising instruments that facilitate the mediation of teaching and learning processes (BARADINELLI, 2014). In nursing, the use of ECT in health enables the concomitant exercise of caring and educating through products and/or processes (MARQUES *et al*., 2020).

Salbego *et al.* (2018) use the term care-educational technology (TCE) in an innovative perspective of developing technological products and processes, in a perspective that promotes the interrelationship between care and education, since the integration of both in the practice of nurses is recognized.

The use of TCEs in health for family members / caregivers is effective in terms of the process of guidance and care information. The nurse with the Systematization of Nursing Care (SAE) and the practice of health education, becomes increasingly able to use technologies to improve the care process for people and their families, increasingly enabling the implementation of innovative processes, whose purpose is to qualify, plan and optimize self-care, providing quality in the conduct of home care (LANDEIRO *et al.*, 2015).

Technologies aimed at specific health care are necessary and relevant, however, thinking in the expanded sense of health, they should not fail to have their space in educational strategies. In his praxis, the nurse uses technology in multiple fields, expanding the dimension of care with a view to improving the quality of life of the individual, family, community (TEIXEIRA; MEDEIROS, 2017).

Therefore, these technologies can be used for care guidelines for children with heart disease, by different means. The *smartphone* is an essential tool for health management, in addition to being a facilitator of access to technologies, it offers practical accessibility to the internet to access *websites* allowing the installation of applications (KENNELLY *et al*., 2018).

Due to the long treatment, complex care and emotional distress, the birth of a child with CHD is an important situation for parents. Dependence, insecurity and a sense of helplessness are feelings experienced in common by many family members due to the child's condition (QUEIRORA *et al*., 2017).

Planning and developing strategies to support family members/caregivers who need to be part of the management and clinical care of children with CHD as part of the treatment is necessary (SILESHI & TEFERA, 2017). Judging by the parents who experience feelings of anxiety and fear, an easily accessible information point would be one of the ways to provide support to them, clarifying their doubts and anxieties.

From the recognition of the possibility of using new technologies as a care-educational tool, the idea of building a *web* page with quality content that can be accessed through *smartphones*, conventional computers, *tablets*, *laptops* or any other device with internet access came up.

The interest in the theme arose from the professional experience as a nurse for years of work in the care and care of these people (children and parents / guardians) and, still assuming, at a time in my professional career, the responsibility with the Congenital Heart Disease Program of the State of Amazonas, which takes place from primary health care to monitoring in the State reference unit. This care experience allowed me to realize that many parents sought care on a recurring basis, especially after hospital discharge. This happened, and continues to happen, probably out of fear, lack of knowledge and insecurity in dealing with the various and complex issues related to CHD, its care and treatment. Possibly also due to gaps in the guidance given to parents/caregivers during hospitalization by nurses.

The Systematization of Nursing Care (SNC) enables nurses to promote the use of good care practices by directing individualized nursing care in cardiopediatrics. Thus, it is up to the nurse, in the presence of the medical diagnosis of CHD, to establish and perform nursing care, keeping the child hemodynamically stable, in addition to providing necessary information to family members for the continuity of care (GUTIÉRREZ, 2017).

It should be noted that SAE is a task of paramount importance that should be performed in all hospital sectors, assisting in the treatment and care of each patient (CORBELLINI; COSTA; PISSAIA, 2019).

Thus, the purpose of this study was to build a health ECT in the form of a *website*, with basic information to guide family members / caregivers of children with congenital heart disease after discharge from hospital after surgical correction, in order to enhance positive responses in the care of the child, especially with regard to basic care such as hygiene, feeding, physical activities and others, which may still generate doubts for the person responsible for the child at home.

2 OBJECTIVE

To build a care-educational technology in health, in the format of a *website,* with guidelines for family members / caregivers on basic home care of children with congenital heart disease after surgical discharge.

3 METHODOLOGY

This is a methodological study. Methodological studies involve investigations of the methods of obtaining and organizing data and conducting rigorous research. They also deal with the development, validation and evaluation of research tools and methods (POLIT, 2019).

The development of a technology, within the methodological study, occurs through three processes: construction, validation and application that can be carried out in a single study or in isolation (TEIXEIRA; NASCIMENTO, 2020). In this case, the construction and validation stages were contemplated.

It was developed for family members/caregivers of children with CHD post discharge from surgical repair, who have had their children hospitalized and with the prospect of care

According to Teixeira and Nascimento (2020), the construction of the product can be based on the literature with a view to guaranteeing theoretical-scientific quality and/or based on the context through an exploratory study guaranteeing sociocultural quality . In this study, we chose to use national and international scientific evidence that was identified from the Integrative Literature Review (ILR).

In addition to RIL articles, some national and international consensus and reference guidelines on CHD, cardiology and pediatrics were used to develop the content of the *website.*

4 DEVELOPMENT

In this study, it was observed that a large portion of the publications are integrative reviews. However, the categories that emerged from this work were: nursing care In this study, it was decided to use national and international scientific evidence, which was identified from an Integrative Literature Review (ILR) on the development of *website* content.

The integrative literature review consists of the construction of content with a guarantee of theoretical-scientific excellence and / or in context, through an exploratory study, ensuring sociocultural quality (TEIXEIRA; NASCIMENTO, 2020).

The integrative literature review is a specific research method that ensures the synthesis and critical evaluation of theoretical and empirical evidence of a given theme or event. With this, it allows its product to present a current discussion about what was investigated, assisting in the implementation of effective interventions in health care, cost reduction, construction of multidisciplinary knowledge in health and the improvement of public health practices and policies (MOURA *et al*., 2015).

The present research was developed in six moments: 1 - identification of the problem to be solved and elaboration of the research question; 2 - elaboration of the inclusion and exclusion criteria of the articles; 3 - extraction of pertinent information from the selected studies; 4 - evaluation of the selected studies to compose the integrative review; 5 - reading and interpretation of the studies; 6 - organization, discussion and complete synthesis of the publications (GALVÃO; PANSANI; HARRAD, 2015).

In the first stage, the PICo strategy was used to formulate the guiding question, being P (population), I (intervention), Co (context) (SANTOS; PIMENTA; NOBRE, 2007). Therefore, the following question was elaborated: "What are the nursing guidelines (I) for caregivers of children with congenital heart disease (P) after hospital discharge (Co)?".

In the development of the second stage, the search was carried out between April and July 2022. For the search strategy, the following descriptors present in the established Health Sciences Descriptors (DeCS) and *Medical Subject Headings* (MeSH) were used: "*Nursing Care"*; "*Nursing"; "Congenital Heart Defects"; "Caregivers"*; "*Children",* related to the Boolean operators *AND and OR*.

For data selection, articles published in scientific journals were analyzed, using the databases of the Virtual Health Library Portal (VHL), such as: Latin American and Caribbean Literature in Health Sciences (LILACS), *Medical Literature Analysis and Retrievel System Online* (MEDLINE) and Nursing Database (BDENF). For the search in the *Scientific Electronic Library Online* (SCIELO), the page "scielo.br" was used. The databases used were selected because they are reference in the area of health and nursing.

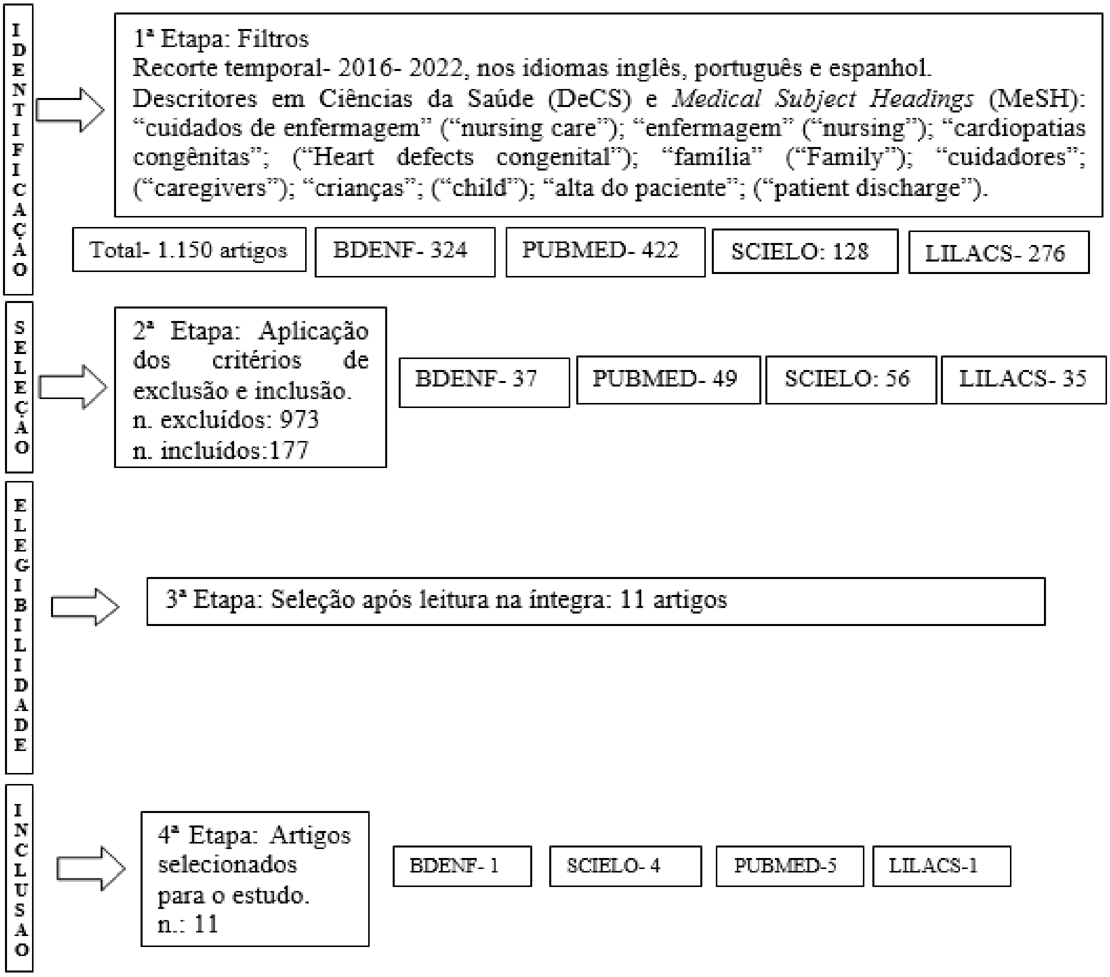
As for the inclusion criteria, articles were selected that contemplated the theme and were directed to the objective of the study, available in full in electronic media for free, in Portuguese, English and Spanish; published between 2016 and June 2022. As exclusion criteria, duplicate articles, editorials, publications in event proceedings, theses, dissertations, monographs and incomplete documents were adopted; and not being available in full *online*.

To ensure the quality and reliability of the study, the PRISMA *Guideline* recommendation (*Preferred Reporting Items for Systematic reviews and Meta-Analyses*) was adopted, which is composed of a structured *checklist,* capable of describing all the important and essential steps and approaches for the elaboration of a review, added to the flowchart (Figure 2) that discriminates the elements of the methodology of identification, selection, eligibility and inclusion of references (GALVÃO; PANSANI; HARRAD, 2015).

Several classifications are available in the literature, however, the most classic *score* for classification of primary studies was systematized by the Oxford *Centre for Evidence-Based Medicine (*CEBM) in 1998 and its last update was carried out in 2009 (VILLAS BOAS; VALE, 2014).

A total of 1,150 publications were identified, of which 973 were excluded after applying the filters and inclusion and exclusion criteria, leaving 177 articles. Subsequently, the selection was made by reading in full the articles considered potentially eligible, whose titles and abstracts informed evidence on the subject, totaling 11 articles (FIGURE 1).

Figure 1: Flowchart of the study selection process. Brazil, 2022



1ª Etapa: Filtros
Recorte temporal- 2016- 2022, nos idiomas inglês, português e espanhol.
Descritores em Ciências da Saúde (DeCS) e *Medical Subject Headings* (MeSH): "cuidados de enfermagem" ("nursing care"); "enfermagem" ("nursing"); "cardiopatias congênitas"; ("Heart defects congenital"); "família" ("Family"); "cuidadores"; ("caregivers"); "crianças"; ("child"); "alta do paciente"; ("patient discharge").

2ª Etapa: Aplicação dos critérios de exclusão e inclusão.
n. excluídos: 973
n. incluídos:177

3ª Etapa: Seleção após leitura na íntegra: 11 artigos

4ª Etapa: Artigos selecionados para o estudo.
n.: 11

Source: The authors (2023).

The selection steps were carried out, for the storage, transcription and analysis of the articles, a protocol was prepared by the authors. All information was transferred and allocated in the Microsoft Excel *software*® 2016.

The presentation of the results and their discussion was carried out in a descriptive manner, enabling the reader to assess the applicability of the literature review in order to positively impact nursing practice by providing an organized way to review the evidence on a topic.

The level of evidence of the selected studies was based on the classification of Melnyk and Fineout-Overholt (2010), which categorizes research into 7 levels of evidence, where 1 is the level of greatest evidence: I- systematic reviews with meta-analysis of clinical trials; II- randomized clinical trial; III- clinical trial without randomization; IV- cohort, case-control; V- systematic review of descriptive works; VI- single descriptive or qualitative study; VII- opinion of expert committees or authorities.

The included studies were assessed. This phase is equivalent to the data analysis of a conventional search; the studies were analyzed in detail, critically, seeking explanations for conflicting data in the different studies. The clinical competence of the reviewer contributes to the critical appraisal of the studies and assists in decision making for the use of the results in clinical practice. The conclusion of this stage can generate changes in the recommendations used in practice (MENDES; SILVEIRA; GALVÃO, 2008).

The interpretation of the results corresponds to the discussion phase of the main findings in conventional research, where the reviewer based on the results of the critical evaluation of the included studies performs the comparison with the theoretical knowledge, the identification of conclusions and implications resulting from the integrative review. The identification of gaps allows the reviewer to point out relevant suggestions for future research aimed at improving health care (MENDES; SILVEIRA; GALVÃO , 2008).

The synthesis of knowledge was carried out by presenting the main results of the selected studies, composing the synthesis of the evidence available in the literature on the chosen theme. This is an extremely important step, since it produces impact due to the accumulation of existing knowledge on the researched theme, directly assisting in the development of the *website* content.

Search for consensus in the main scientific societies on cardiology, pediatrics and other important content on the *subject*

Once the RIL stage was completed, there was a need to complement the information with the search for consensus and protocols in the main scientific societies on cardiology/pediatrics. The Brazilian Society of Pediatrics (SBP), the Brazilian Society of Cardiology (SBC), the São Paulo Society of Pediatrics (SBP) and the *American Heart Association,* which are references in the field of cardiology in Brazil and the United States of America (USA), were sought.

In order to broaden the searches*,* *Google Scholar* was used with the words *Heart Defects, Congenital; Educational Technology; Biomedical Technology***,** to identify other consensuses that could contribute to the elaboration of the technology content, which allowed the identification of some consensuses: Portuguese Society of Cardiology (SPC), American Academy Of Pediatric Dentistry

(AAPCD), The American College of Cardiology Foundation (ACC), The Melbourne Vaccine Education Centre (MVCE).

Building the *website*

The selection of the content to compose the care-educational technology was based on the result of the analysis of the ILR, which indicated the relevant care to be performed after discharge, complemented by the information of the consensus. The researcher's knowledge and experience in the subject contributed to the process of defining the contents to be included in the care-educational technology.

The *layout of* the *website* was defined by the researcher and the contracted developer. The elaboration followed the interfaces in a logical sequence of care: Home page; Grounded guidelines on care that were evidenced in the textual elaboration; Composition of the technology development team; Comments and suggestions. After defining the *layout*, the page was diagrammed with the review of the counselors in relation to text and appearance.

With the information obtained from the RIL and the search for consensus from scientific societies, we moved on to the stage of building the content of the *website* with the knowledge conducted by the different texts, bringing more subsidies to select the theme of interest for the elaboration of the proposed technology.

The final decision on the technical structure of the *website* content was organized into 11 items, which are briefly described in Table 1, on the main care and guidance needed for the return home of the child who underwent surgery to correct congenital heart disease.

One of the decisions was to treat the *website* as baby/child, due to the specificities of caring for babies, which in some situations are different from older children.

Table 1- Technical content of the *website*

Website item	Description
How to hold your baby/child	It guides family members/carers in a practical and objective way.
Behavior	Highlights the importance of observing changes in the behavior of infants/children at home.
Visits	Presents the main points of attention and care in relation to home visits to the baby/child.
Food	Presents relevant guidance on the infant/child feeding process.
Vaccines	It highlights the importance of the vaccination schedule of the baby/child and the necessary care.
Medicines	Shows care in the administration of medicines.
Surgical scar	Indicates protective care of the surgical incision.
Body hygiene	Indicates the main care related to the hygiene of the baby/child.
Mouth care	It indicates the care for the healthy practice of oral hygiene of the baby/child.
Return to daily activities	Provides an overview of the child's return to daily activities
Warning signs and symptoms	It lists the main warning signs and symptoms in relation to possible complications.

Source: The authors (2023).

The elaboration of the *website* lasted about 30 days, from the elaboration of content to the finalization of the *site* structure, totaling 14 *web* pages. The *website* is implemented with a registered domain and is available at *https://enfcardioweb.com.br. The* ECA was entitled "***Ufa! Back home! Guidelines for the return with baby/child who underwent surgery for correction of congenital heart disease***".

The *site* uses *WordPress* version 8.0 upwards, Php version 7.0 upwards and MySQL. *WordPress* is a Content Management System. It is a PHP *framework* that aims to abstract the complexity of creating a website, making it possible for the developer to worry more about *design* and user experience and less about the code itself. Its use optimizes development time by accelerating the delivery of an elegant and stable system (SOUZA, 2022).

The domain name of the *website* address was paid to allow its use for five years of use. For the hosting, which is classified as a rental of a digital space to make the *website* available 24 hours a day, also the right paid was for five years of use.

The *website* was designed with a simple, didactic, responsive *layout,* which can be accessed through cell phones with internet access, *tablet*, computers, regardless of the operating system, through the main browsers without losing functionality.

All the pages of the *website* followed the same standardization in relation to the colors, the logo of the *site, the* menu, the text, the size and the color of the font as its *layout*. An element of great importance for the communicability of a *website* is color, as it influences the aesthetics of the virtual page.

The images were obtained through a graphic *design* tool called "*envatoelements*", which is a copyright-free photo bank and was used to amplify the meaning of the text, but also to take into account the diversity of the target audience. For the insertion of the images, the resource of the professional developer of the technology was used, being included together with the texts to which they referred.

The homepage was developed to arouse the user's interest by stating the purpose of the *website* and reinforcing the simplicity of reading the content, in addition to facilitating navigation on the other pages of the tool.

From the home page, the fixed top menu is found and organized into four major main items to direct the reader to new pages that translate into the main "buttons" of the site: "Home page", "Guidelines", "Team composition", "Comments and suggestions".

When unfolding the second button of the *website* home page, defined as "Guidelines", the second page is opened where the information was organized according to its importance, identification and separation into subjects according to the established thematic content, with the opening of a specific page for each theme, following the following order: "How to hold your baby/child", "Behavior", "Visits", "Feeding", "Vaccinations", "Medications", "Care of the surgical scar", "Care of hygiene", "Care of the mouth", "Return to daily activities", "Warning signs and symptoms".

Clicking on the third button on the home page opens the third page of the *website*, defined as "Team composition", containing a brief history of the professional profile of the participants in the creation of the technology, as well as the contact address via *email* with the authors of the *website* content. Within this page we can still find the logos of the organizations that contributed to the development of this work.

The fourth button on the home page when accessed is the opening of the fourth page of the *website*, which is specific for comments and suggestions in order to establish a link with the community that visits the *website*, where the reader can send comments, messages containing questions, recommendations, compliments, criticisms and suggestions.

At the end of the *website* construction stage, the professional technology developer presented a prototype containing all the *design* elements and a first level of navigation for evaluation by the authors. At this stage, it was necessary to thoroughly check the texts so that there were no conceptual and grammatical errors. After approval, the creation and development stage followed, and then the implementation and validation of the *website*. In the implementation stage, the *website* content was hosted on a server.

This process was carried out by the company *Resolut* tecnologia, The company performed the finalization, the integration of all pages, the verification of all content, as well as the analysis of the interface and the final testing of the *website* navigation.

For the process of educational mediation, attention is needed in the management of the content, because, in the case of offering excessive information, it can lead readers to lose focus.However, if new information is not addressed, learning is limited. Knowledge should reflect on particular and real situations and their articulations to contexts and curiosities (VALLIN, 2014).

Regarding the visual presentation of the *website*, the images used were considered adequate by the evaluators, the evaluation revealed that the images established a relationship with the content addressed. Images with visual and didactic quality constitute an educational resource that provides the integration of knowledge, after all recognizing and knowing the capacity that technologies have to contribute to education is a very important step for its expansion (ALVES, 2020).

The *website* development process took place in a different way, not only considering the technical aspects, but also didactic and easy learning aspects, such as the difference in certain baby and child care as can be evidenced in the technology content. The importance of a specific field for comments and suggestions was due to the need to further corroborate the interaction with caregivers so that they obtain means to participate more actively through this communication channel.

The use of a *website* to guide family members / caregivers about the care provided to the child after discharge from surgery becomes a facilitator for the performance of activities, as well as a means of communication easily accessible by family members / caregivers, especially by cell phone, globalized and fast, offering updated, reliable information and providing the sharing of such information**.**

The creation of the technology sought to offer a *website* with educational care content distributed in a systematized way, organizing the information in a logical way to facilitate the navigation and location of the subjects so that the target audience has a means of acquiring knowledge in an accessible, easy and reliable way for the understanding and development of basic care. Specific care that is necessary according to the special condition of the child is not included in the *website* developed, which includes care that is necessary for all children. This special care should be given during hospitalization or at the primary care consultation by the health professional who accompanies the child.

Figure 2- Technology in *website* format

Ufa! De volta em casa! Orientações para o retorno com bebê/criança que realizou cirurgia para correção de cardiopatia congênita.

Source: The authors (2023).

5 FINAL CONSIDERATIONS

The study was developed with the intention of building a feasible health ECT that guides the family/caregivers of children with CHD to better understand the care to be performed at home. It was built to be accessed in an easy, practical, dynamic, innovative and relevant way. It intended to promote greater knowledge for family members/caregivers about the necessary care, in addition to the identification of warning signs and symptoms, in order to favor the evolution of children with the realization of safe home care.

The *website* can allow knowledge to be appropriated by families in a practical, easy, innovative and economical way; it can also generate a positive impact on society, contributing to the improvement of the quality of life of these children and their families.

CHD provides family members/caregivers with an often negative understanding of the disease, surrounded by pain, suffering, uncertainties, doubts, losses and lack of control. Many are the adversities influenced by the disease, causing caregivers to give up their lives to accompany their baby or child, meeting their demands and needs. In general, they show satisfaction and make a point of following the whole process, whether during the discovery of the disease, through hospitalization until hospital discharge, not caring about the fact that they detach themselves from their daily lives, starting to follow life according to hospital routines and treatment requirements.

The production and propagation of health and care represent the incorporation of the theme and the logic of informatics, favoring the practices of humanized care, based on needs and that can reinforce the continuous action of the proposal, through more platforms that contribute to the practices and care aimed at family members / caregivers of children with CHD.

In view of the great growth in the use of information technology, after all, an increasing number of people are looking for health information on the Internet and the practicality that is eminent in receiving this information with greater proportions. The elaboration of this *website* is a relevant source of health information to contribute to the continuity of home care until the return of the normal routines of your child's daily activities.

In the elaboration of the *website* content, we sought to use tools to facilitate the learning process, aiming at a care that would promote a healthier life of the child with CHD, taking into account that it is influenced by several aspects, including differences in the way people retain knowledge.

The construction of this *website* was based on scientific principles, following all the methodological rigor of a scientific research. The content of the technology is easy to understand, accessible language, dynamic and interesting. It is a way to offer knowledge to the caregivers of these children with CHD when they are discharged from hospital, making them the protagonists of conducting the continuity of care at home.

Based on these definitions, the evaluated *website* achieved this objective according to the analysis of the expert judges of content and appearance of the study, who agreed with the statement regarding the logical organization of information for user understanding, ease of navigation and location of subjects.

Analyzing the language used, all agreed that the content on the *website* provided had an easy-to-understand language, and the information was distributed in a logical and direct way. The information contained on the *website* was considered up-to-date by all content experts and, according to the majority, covers the purpose so that family members / caregivers identify with the *website*.

In general, it was considered an effective care-educational tool, relevant, didactic, interactive and interesting, which can add knowledge and clarify many doubts of family members / caregivers of children with CHD after discharge from surgery. It can be used by health professionals who care for children with CHD who have undergone corrective surgery, especially by nurses, both in the hospital area and in primary care.

The nurse who cares for children with CHD, when carrying out the systematization of care, can integrate the indication of the *website* for family members / caregivers into their care plan, in order to provide greater support to them. They can hold orientation meetings using the *website* as a guide and dedicate themselves more specifically to the care that is specific to each child.

Progressively, the term "Systematization of Nursing Care" has reached comprehensiveness in nursing practice. The concept of SNC has embraced during its maturation process an organizational aspect of care for the operationalization of methods and instruments that enable care actions.

It is hoped that, through the dissemination of the results of this work, health education initiatives may arise through new educational care approaches via the Internet for the population, since these can serve to complement and enrich actions aimed at this theme.

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