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Original Article

Development and validity of a care-educational booklet for preventing postoperative complications in cardiovascular surgeries*

Desenvolvimento e validação de uma cartilha cuidativo-educacional na prevenção de complicações no pós-operatório de cirurgias cardiovasculares

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ABSTRACT

Objective: to develop and validate an educational booklet for the postoperative period of cardiovascular surgeries. **Methods:** a methodological study was conducted in three stages: pre-development, with situational diagnosis and survey of the profile of patients and caregivers in a cardiology hospital; development, with an integrative literature review and preparation of a printed booklet according to content, structure, language, and design criteria; and post-development, with validity by nine judges among nurses and designers, using the Content Validity Index, coefficient of variation, and text readability test. **Results:** the sample consisted of 60 participants, predominantly older men with low levels of education. The main questions concerned hygiene and wound care. The booklet presented an overall Content Validity Index greater than 0.90 and a good to excellent agreement rate, being considered clear, accessible, and scientifically consistent. **Conclusion:** the "*Cuidando da sua ferida*" (Caring for your wound) booklet proved valid in terms of content and appearance. **Contributions to practice:** educational technology promotes self-care, empowerment, and systematic hospital discharge planning, strengthening clinical and educational nursing practice.

Descriptors: Educational Technology; Perioperative Nursing; Health Education.

RESUMO

Objetivo: desenvolver e validar uma cartilha educativa para o pós operatório de cirurgias cardiovasculares. **Métodos:** estudo metodológico realizado em três etapas: pré-desenvolvimento, com diagnóstico situacional e levantamento do perfil de pacientes e acompanhantes em um hospital cardiológico; desenvolvimento, com revisão integrativa da literatura e elaboração da cartilha impressa conforme critérios de conteúdo, estrutura, linguagem e design; e pós-desenvolvimento, com validação por nove juízes entre enfermeiros e designers, utilizando o Índice de Validade de Conteúdo, coeficiente de variação e teste de legibilidade textual. **Resultados:** a amostra foi composta por 60 participantes, predominando pacientes idosos, do sexo masculino e de baixa escolaridade. As principais dúvidas referiam-se à higiene e aos curativos. A cartilha apresentou Índice de Validade de Conteúdo global superior a 0,90 e taxa de concordância entre bom e excelente, sendo considerada clara, acessível e cientificamente consistente. **Conclusão:** a cartilha "Cuidando da sua ferida" mostrou-se válida quanto ao conteúdo e à aparência. **Contribuições para a prática:** a tecnologia educativa favorece o autocuidado, o empoderamento e o planejamento sistemático da alta hospitalar, fortalecendo a prática clínica e educativa em enfermagem.

Descritores: Tecnologia Educacional; Enfermagem Perioperatória; Educação em Saúde.

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Introduction

Surgical wounds are intentional injuries that, although planned for primary healing, can develop complications such as infections, hematomas, or seromas, compromising the process and increasing the inherent risk to surgical patients. In this context, cardiovascular surgeries represent complex procedures that, while essential for restoring health, expose patients to multiple risks of postoperative complications[1].

These complications prolong hospital stays, increase hospital costs, and negatively impact patients' and their caregivers' quality of life. In this scenario, nurses play a crucial role, with legal responsibilities ranging from consultation and wound care to coordinating the team in wound care prevention and promotion[2].

Educational technologies emerge as indispensable tools for health education. They standardize and assist the guidelines provided by nursing, ensuring safe and effective care[3-4]. In particular, printed educational technologies innovate in the dissemination of health information, simplifying communication and fostering dialogue between patient and team. Within this universe, care-educational technologies based on the concept of "care-education" promote autonomy and empowerment, facilitating self-care and self-management in daily healthcare[5].

Self-care is the practice of activities initiated by individuals to maintain their life, health, and well-being[6]. Nursing, through the Systematization of Perioperative Nursing Care, is responsible for ensuring patients' comfort and autonomy, contributing to anxiety reduction and complication prevention[3,7]. Educational technologies are strong allies for nursing to promote self-knowledge and self-care, providing scientific information in an accessible and clear manner, ensuring that guidelines are followed safely[8-11].

A care-educational booklet exemplifies this approach, being an accessible technology that nurses can use to guide patients and caregivers both in the immediate postoperative period and in the intermediate and late periods. These educational actions can be carried out in various environments, adapting to individual needs. The booklet serves as a valuable complement to the guidance of the multidisciplinary team, without replacing it[5].

This study is based on Dorothea Orem's Self-Care Theory, which recognizes patients as active agents of their own care, and on the concept of care-educational technologies, which integrates the care-education process through approaches that promote autonomy, empowerment, and health literacy[6–7]. The pedagogical approach adopted includes accessible language, functional illustrations, and instructional design principles appropriate to the target audience's sociocultural profile, promoting comprehension and retention of essential information for safe care.

The distinctive feature of this proposed guide lies in its construction based on the real-life situational diagnosis of patients and their companions at a cardiology institution. It provides specific content on risks, care, and typical complications of cardiovascular surgeries, content absent in generic materials, integrating updated evidence, theoretical and methodological principles, ensuring scientific consistency. Finally, it underwent a rigorous content and appearance validity process with expert judges in perioperative nursing and graphic design.

Designed for patients undergoing cardiovascular surgery and their caregivers, this proposed booklet integrates principles of care-educational technologies and Dorothea Orem's Self-Care Theory, articulating pedagogical foundations, instructional design, and updated scientific evidence to promote autonomy, health literacy, and safe continuity of care after discharge. It is expected that this material will enhance nursing education actions, strengthen hospital discharge planning, facilitate the early detection of signs of complications, and contribute to a more effective, systematic clinical practice centered on patients' real needs.

Therefore, this study aimed to develop and validate an educational booklet for the postoperative period of cardiovascular surgeries.

Methods

Study type

This is a methodological study that used the revised Standards for Quality Improvement Reporting Excellence (SQUIRE) guide to construct its methodology.

Study design

This investigation was composed of three phases: pre-development, which consisted of gathering clinical and epidemiological profiles of participants hospitalized in wards at a reference hospital for cardiac surgery and their respective companions or caregivers. This was followed by an integrative review, which provided the necessary literature review on the subject; development, which involved the creation of an educational technology in the form of a booklet; and post-development, in which the educational material content and technical appearance were validated by expert judges[1].

Pre-development phase: situational diagnosis

In the first stage of this study, classified as observational and cross-sectional, a survey was conducted to assess the knowledge of volunteer patients in the research and their companions and caregivers, who were selected by convenience. The data were collected using a Google Forms instrument and statistically analyzed with a sample of 60 volunteers.

Study site

This study was conducted in the postoperative wards of the University Cardiology Emergency Room of Pernambuco in the city of Recife. During the data collection period, the eligible population consisted of all patients undergoing cardiovascular surgery and admitted to the aforementioned wards (n=78), accompanied by their respective caregivers. The final sample consisted of 60 patients and 50 caregivers (n=110), selected by convenience, since all individuals who met the pre-established criteria agreed to participate. Since this is a preliminary methodological study with a descriptive diagnostic phase, no probabilistic sample size calculation was performed. The sample was defined based on parameters of feasibility, accessibility, and information saturation, according to recommendations for educational technology development studies.

Study period

Data collection took place between May and August 2023. The instrument, in the form of a previously structured and validated questionnaire, was applied in person by the researcher, in the format of an individual interview, ensuring standardization of the procedure, privacy, and adequate understanding of the questions. The instrument addressed sociodemographic data, clinical profile, and information regarding participants' knowledge, doubts, and difficulties concerning surgical wound care[12].

This study included patients over 18 years of age, hospitalized in the immediate or intermediate postoperative period following cardiovascular surgery, accompanied by a direct caregiver responsible for home support, also of legal age. Specifically, participants were invited during the postoperative recovery phase to report perceptions, doubts, experiences, fears, and needs related to wound care and home self-care.

Exclusion criteria took into account the eligible population without compromising data consistency. Thus, patients with non-surgical clinical conditions who were in the ward, individuals with cognitive impairment that limited comprehension or communication, and caregivers who did not play an active role in home care were excluded. This definition follows the logic of set theory, ensuring methodological precision and coherence.

Development phase

Based on the data collected on the difficulties identified in the knowledge of patients and their caregivers, as well as the results of the integrative review, it was possible to develop an educational graphic tool, developed according to the methodological framework of care-educational technologies. The technology was structured in the form of a booklet, a printed instructional resource that acts as study material and contributes to facilitating and consolidating the learning process.

The greatest challenge consisted of unifying the difficulties reported by research volunteers and adapting the language to the target audience's comprehension level, integrating the most recent evidence identified in scientific literature. This process enabled the development of educational material aimed at strengthening health education and empowering patients and caregivers in managing self-care related to surgical wounds. The booklet's textual part was subjected to a readability test using a specialized linguistic analysis tool, and the final formula was applied to determine the readability index. These metrics consider variables such as sentence length and lexical complexity, directly influencing the material comprehensibility[4]. The readability index obtained was 38.2, classified as high readability and adequate to the level of health literacy identified in the target audience.

The final formula used is the arithmetic mean of four indices from the grading level scale (0-20): Final formula = Flesch-Kincaid+Gunning fog+ARI+Coleman--Liau/4.

Post-development phase

The third phase consisted of content and appearance validity, carried out in two rounds by nine judges (six nurses and three designers). A four-point scale was used, establishing a validity index greater than 0.80 and a coefficient of variation below 20% as the success criterion. After adjustments from the first round, the material achieved an overall V of 0.90, with agreement between good and excellent[1].

The committee composition followed the literature recommendation of three to 20 specialists, resulting in nine judges divided between design (group 1) and nursing (group 2). Selection was based on adapted expertise criteria with a maximum score of ten points: for designers, higher education, experience in health education, and work in the field were considered; for nurses (teaching or clinical), priority was given to work in stoma therapy or surgical areas, in addition to academic qualifications and professional experience[13-16].

Judges were selected through nominations from Graduate Programs, Research Group Directories, and by consulting the *Lattes* Curriculum available on the Brazilian National Council for Scientific and Technological Development (In Portuguese, *Conselho Nacional de Desenvolvimento Científico e Tecnológico* - CNPq) platform, as well as by nomination among participants, using the snowball sampling technique. Those who achieved a minimum score of seven points were invited to participate as judges[17-18]. After analyzing the criteria in group 1, the scores were: judge 1 (7 points), judge 2 (10 points), and judge 3 (7 points). In group 2, the scores were: judge 1 (8 points), judge 2 (10 points), judge 3 (8 points), judge 4 (8 points), judge 5 (10 points), and judge 6 (10 points).

Data collection took place between January and February 2024, with six health experts validating the content and three design experts verifying the appearance. After selection based on expertise criteria, specialists were invited by email, where they received the study objectives, the PDF booklet, and links to the Informed Consent Form and the assessment instrument via Google Forms. Participation was voluntary and conditional upon formal consent being signed.

Data were analyzed quantitatively using the Content Validity Index (CVI), which measures the proportion of agreement among judges. Following the recommendations, a cut-off value equal to or greater than 0.80 was adopted to classify items as adequate[19].

When assessing an educational technology, it is necessary that its content be consistent with the target audience's daily needs (O1), relevant to improving their quality of life or work (O2), have the potential to invite or instigate changes in behavior and attitude (O3), present the rigor necessary to circulate within the area's scientific community (O4), and be aligned with the objectives of the institutions that assist the target audience (O5).

In relation to structure and presentation, the analysis encompasses multiple factors. The content must maintain coherence with the audience's daily needs (S1), with clear and objective messages (S2) and scientifically accurate information (S3). The material needs to be appropriate to the user's sociocultural level (S4), following a logical sequence in the proposed content (S5). Textual quality is verified by good structure in terms of agreement and spelling (S6) and by a writing style that corresponds to the target audience's level of knowledge (S7). The coherence of the information on the cover, back cover, table of contents, acknowledgments, and introduction is assessed (S8). Also assessed are the adequacy of the title and topic sizes (S9), the expressiveness and sufficiency of the illustrations (S10), the appropriate choice of material (paper or artwork) (S11), and whether the page count is appropriate (S12).

Finally, pedagogical relevance is confirmed if the themes portray key aspects that should be reinforced (R1) and if the technology allows for the generalization and transfer of learning to different contexts (R2). The tool must be able to propose the active construction of knowledge (R3), address all the subjects necessary for the target audience's knowledge (R4), and be versatile enough to be used by any professional working with this audience (R5).

The analysis of the structure and presentation of an educational technology encompasses a detailed set of criteria. It is fundamental that the information and content are consistent with the target audience's daily needs (S1), with messages presented clearly and objectively (S2) and scientifically accurate information (S3). The material must be appropriate to the audience's sociocultural level (S4), and the content must follow a logical sequence (S5). Textual quality is verified by good structure in terms of agreement and spelling (S6) and by a writing style that corresponds to the target audience's knowledge level (S7). Additionally, the coherence of the information on the cover, back cover, table of contents, acknowledgments, and presentation is assessed (S8), as well as the adequacy of the size of titles and topics (S9), the expressiveness and sufficiency of illustrations (S10), the appropriate choice of material (paper/artwork) (S11), and whether the number of pages is adequate (S12).

The analysis of agreement among judges used the CVI, adopting as interpretation standards values ≥ 0.80 (excellent), 0.60 to 0.79 (good), and ≤ 0.59 (inadequate). For the overall validity of the scale (S-CVI/Ave), the average of the indices was used, with a cut-off of 0.90. Although the literature recommends more robust methods such as Aiken's V for future research, the indices achieved made further rounds of assessment unnecessary[1].

The coefficient of variation was also used, which provides the variation of the data obtained in relation to the mean, therefore expressing the assessment precision, repeatability, and reproducibility. This coefficient was calculated by dividing the standard deviation by the mean of the assessment of each item. For the analysis of this ratio, the smaller the value of the coefficient of variation, the more precise the estimate will be. For this study, measures below 20% were adopted as ideal[12,19].

Following judges' feedback, further changes were made to the first version of the booklet using the Canva application, adhering to their suggestions. This resulted in the second and final version of the booklet, which was then re-assessed by the same judges who participated in the first version. The results were satisfactory enough that no further changes were necessary, thus concluding the final stage of educational health booklet content and appearance validity. Suggestions for modifying items were analyzed by the researcher and are presented in the results.

Ethical aspects

The principles of bioethics were respected. The study was approved by the *Universidade de Pernambuco* Research Ethics Committee, under Opinion 5,657,741/2022 and Certificate of Presentation of Ethical Consideration 58589922.7.0000.5192.

Results

The first stage of this study consisted of profiling the population, which was evidenced in the sociodemographic variables analyzed after data collection. In the sociodemographic and clinical characterization of the studied population, a predominance of older patients and adult caregivers was observed, with a majority of males among patients and females among caregivers. Most participants in both groups self-identified as mixed-race, and a low level of education was found, with primary education being the most common among patients and secondary education among caregivers.

In terms of clinical profile, the majority of patients did not have diabetes mellitus, while hypertension and other comorbidities were frequent. Regarding wound care, it was found that a significant portion of patients performed basic home care and had received guidance from the healthcare team, a perception that was also reflected among caregivers, especially concerning the importance of hygiene as an essential measure for prevention and management.

From this perspective, it was possible to identify the main needs of the target audience to be addressed in the first version of the booklet, in a clear and easy-to-understand manner, such as wound care, how to perform hygiene and dressing changes. The educational material informs and encourages proper care, addressing the main vulnerabilities of clients and their caregivers. With quality information, it is possible to minimize harm and provide health education (Table 1).

Table 1 – Content Validity Index, coefficient of variation, and agreement rate for nursing judges. Recife, PE, Brazil, 2024

Code*	J1	J2	J3	J4	J5	J6	I-CVI	Mean	Standard deviation	Coefficient of variation	Agreement rate (%)
O1	1	1	1	1	1	1	1.00	1	0	0	100.0
O2	1	1	1	1	1	1	1.00	1	0	0	100.0
O3	1	1	1	1	3	2	0.83	1.5	0.84	0.56	83.3
O4	1	1	1	1	2	1	1.00	1.17	0.41	0.0003	100.0
O5	1	1	1	2	3	1	0.83	1.5	0.84	0.56	83.3
S1	1	1	1	1	1	1	1.00	1	0	0	100.0
S2	1	1	1	3	3	1	0.67	1.67	1.03	0.62	66.6
S3	1	1	1	1	1	1	1.00	1	0	0	100.0
S4	1	1	1	3	3	1	0.67	1.67	1.03	0.62	66.6
S5	1	1	1	1	1	1	1.00	1	0	0	100.0
S6	1	1	1	2	3	1	0.83	1.50	0.84	0.56	83.3
S7	1	1	1	3	1	1	0.83	1.33	0.82	0.0006	83.3
S8	1	1	1	1	1	1	1.00	1	0	0	100.0
S9	1	1	1	1	1	1	1.00	1	0	0	100.0
S10	1	1	1	1	2	1	1.00	1.17	0.41	0.0003	100.0
S11	1	1	1	1	1	1	1.00	1	0	0	100.0
S12	1	1	1	1	1	1	1.00	1	0	0	100.0
R1	1	1	1	1	2	1	1.00	1.17	1.17	1	100.0
R2	1	2	1	1	2	1	1.00	1.33	0.52	0.0003	100.0
R3	1	1	1	1	1	1	1.00	1	0	0	100.0
R4	1	1	1	1	1	1	1.00	1	0	0	100.0
R5	1	1	1	1	2	1	1.00	1.17	0.41	0.0003	100.0
S-CVI											0.94

*Code referring to the identifier of the Content Validity Index (CVI), coefficient of variation, and agreement rate for nursing judges

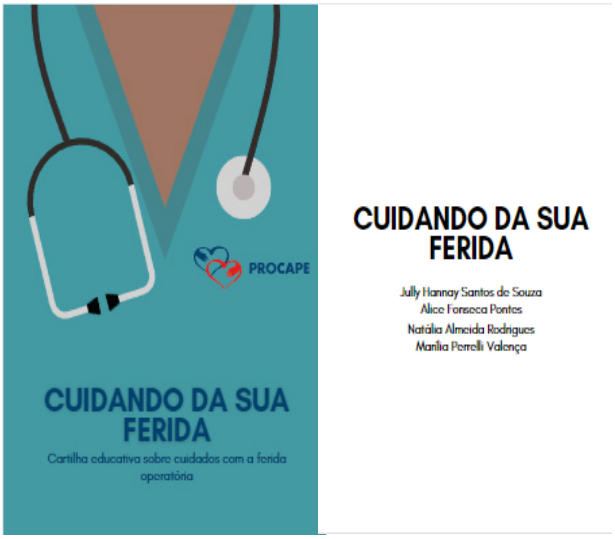
After conducting a literature review to scientifically ground the booklet content, the second stage of this study began, which involved the booklet development. First, a script was created based on the main points raised during data collection. Then, the texts were written, using objective language adapted culturally to the target audience. Following this, the graphic structure was developed with images and texts containing the already elaborated content, thus giving shape to the first version of the booklet. The Canva application was used for this purpose (Table 2).

Table 2 – Content Validity Index, coefficient of variation, and agreement rate for design judges. Recife, PE, Brazil, 2024

Code*	J1	J2	J3	I-CVI	Mean	Standard deviation	Coefficient of variation	Agreement rate (%)
S1	1	1	1	1	1	0	0	100.0
S2	1	1	2	1	1	0.5	0.4	100.0
S3	2	1	1	1	1.25	0.5	0.4	100.0
S4	1	1	1	1	1	0	0	100.0
S5	1	1	2	1	1.25	0.5	0.4	100.0
S6	1	1	1	1	1	0	0	100.0
S7	1	1	1	1	1	0	0	100.0
S8	2	1	1	1	1.25	0.5	0.4	100.0
S9	1	1	3	0.75	1.5	1	0.67	75.0
S10	1	1	3	0.75	1.5	1	0.67	75.0
S11	1	1	1	1	1	0	0	100.0
S12	1	1	1	1	1	0	0	100.0
S-CVI								0.958

*Code referring to the identifier of the Content Validity Index (CVI), coefficient of variation, and agreement rate for nursing judges

There was a significantly adequate agreement rate for both judges' analyses, both for the nursing judges who validated appearance and content, and for the design judges who validated only the educational health booklet appearance. The participation of these judges in their respective areas certainly enriched the final result of the booklet considerably, making the result more positive than what was achieved in the first version (Figure 1).



Note: the illustrations above (screenshots from the mobile app) were only available in Portuguese

Figure 1 – Final version of the educational health booklet. Recife, PE, Brazil, 2024

Discussion

For effective health education, it is essential to understand the target audience profile, considering the social determinants of health. This study revealed that the majority of patients are older men with low levels of education and limited income, a profile that supports the prevalence of cardiovascular diseases in men who tend to seek care late[20-21], especially in cities or regions with lower socioeconomic development. Issues such as restricted access to medical care, difficulty in early diagnosis and insufficient adherence to healthy habits reinforce this population profile.

The low health literacy of these individuals is a notable challenge, impacting the understanding and application of information on surgical wound care[22]. Patients and caregivers highlight hygiene, dressings, rest and adherence to medication as essential care, which underscores the importance of health knowledge for the evolution of lesions, a public health problem in Brazil[23].

Globally, gender and socioeconomic status inequalities are also observed. The World Heart Federation report shows that older men in resource-limited

countries are more vulnerable to the late development of cardiovascular disease, the need for surgical interventions, and premature mortality from these conditions. The complexity of these surgeries results in high rates of hospital readmission due to complications, making the transition of care to the home an essential practice[24]. The lack of systematic planning at discharge and the low quality of guidance can generate doubts and negatively affect patients' and their caregivers' quality of life.

The moment of hospital discharge after major surgery, such as cardiovascular surgery, requires quality guidance to avoid complications. Nurses are essential, coordinating and developing individualized educational plans that address patients' needs. This promotes self-care, placing patients as leading figures of their recovery and ensuring autonomy and responsibility for their well-being[6,24].

Patient autonomy over their own health is vital for informed decisions and maintaining quality of life, preventing readmissions. Nurses, supported by scientific evidence, develop effective educational strategies to motivate self-care[14].

Educational technologies, such as printed materials, are powerful allies that standardize guidelines and promote dialogue, fostering empowerment. In this study, an educational booklet for post-cardiac surgery patients was developed with the target audience's participation and validity by judges. Its high CVI makes it a valuable resource to assist nurses in discharge, prevent complications, clarify doubts, and reduce repeat hospitalizations[5,24-25].

The literature review provided the scientific basis, while language and visual resources were adapted to ensure accessibility for all educational levels. As a physical resource, the booklet can be consulted indefinitely, complementing the healthcare team's guidance without replacing it. Even with an adequate CVI, above 0.90, in both analyses, for both nursing and design judges, judges' suggestions pointed out some weaknesses in the clarity of the messages and their suitability to the target audience's sociocultural profile, resulting in significant changes to the booklet, leading to structural improvements and pedagogical relevance.

Reviewers' comments reflected the viability of educational initiatives, highlighting a high level of reliability in the content and its consistency with the illustrations, as well as the clarity of the instructions provided.

Educational health materials are developed considering the audience's literacy level and sociocultural characteristics, reinforcing the use of accessible language, clear visual communication, and adapted pedagogical resources, promoting greater autonomy and self-care. These culturally sensitive materials facilitate dialogue, information retention, and adherence to recommendations, reducing risks and complications[6].

Materials validated by experts, but with items falling short of expectations, highlight the need for continuous adjustments. The inclusion of functional visual resources, objective language, and logical structure is essential for the educational process. Professionals' involvement and systematic feedback from users for semantic reassessment ensures that content interpretation corresponds to the material's pedagogical objective.

It is noteworthy that, during the validity process by judges, there was an emphasis on the diversity of their professional skills, seeking to enrich knowledge, broaden practical experience, and unify specialized expertise in the health field with the field of design. The objective was to allow for a more comprehensive assessment of the subject matter addressed in the material. Other studies also highlight this approach, demonstrating that a multidisciplinary team's involvement allows for different interpretations and perspectives on the same subject, ensuring diversity in material quality[24].

It is worth highlighting that the materials/tools, products and/or processes used for the development of educational actions can be considered educational technologies insofar as they are subjected to a systematized process of construction and validity[25-27], which is where the main result of this research fits in, which is an educational booklet on health.

The Self-Care Theory integrates self-care deficit and nursing systems theories, emphasizing that patients play a central role in maintaining their own health, needing professional support when they have limitations in performing this care. In the context of cardiovascular surgeries, this perspective becomes particularly relevant, since the success of the postoperative period depends on individuals' ability to recognize signs of complications, maintain adequate hygiene practices, and follow the guidelines provided by the team[8].

As a profession intrinsically linked to care, nursing takes direct responsibility in teaching self-care, acting to promote autonomy and strengthen patients during the rehabilitation process. The Nursing Process, composed of the history taking, diagnosis, planning, implementation, and assessment stages, supports this action by allowing a comprehensive, systematized, and humanized approach. Thus, the use of care-educational technologies, such as the proposed booklet, articulates theory and practice by offering clear, accessible guidance aligned with the real needs of patients undergoing cardiovascular surgery[2].

The choice of the booklet was based on suggestions from healthcare professionals at the unit studied, and from some patients. As seen, all participants in this research are literate, which guarantees accessibility so that the target audience can consult it as many times as necessary.

Study limitations

The study reveals a lack of semantic assessment with the target audience, preventing verification of whether patients and caregivers understood the content as intended. The clinical effectiveness of the booklet also needs further testing in future research. Furthermore, the use of convenience sampling limits participants' representativeness. Additionally, the literature recommends the use of more robust indices, such as Aiken's V index, which consider the weighted distribution of responses and offer a better estimate of validity.

Contributions to practice

The educational booklet integrates theory and practice by converting the principles of Orem's Self-Care Theory into clear and applicable guidelines for the daily lives of patients undergoing cardiovascular surgery. By adapting language, organization, and visual resources to the population's low health literacy, the material facilitates the understanding of recommendations and their incorporation into the home routine.

Therefore, the booklet strengthens self-care in the postoperative period, supports continuity of care, and contributes to preventing complications and readmissions. By enhancing nursing education actions, the material presents practical relevance and coherence with the adopted theoretical framework, increasing patient safety and autonomy.

Conclusion

The "*Cuidando da sua ferida*" (Caring for your wound) booklet was developed from a situational diagnosis and based on evidence, Orem's Self-Care Theory, and the health literacy principles, presenting consistent content appropriate to the target audience. Although it has evidence of theoretical and content validity, it has not yet been tested for clinical applicability and effectiveness.

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Authors' contributions

Conception and design or data analysis and interpretation: **Souza JHS, Pontes AF, Valença MP**. Manuscript writing or relevant critical revision of intellectual con-

tent: **Souza JHS, Pontes AF, Bezerra MK, Andrade MCC, Ferreira e Pereira EB, Bezerra SMMS, Valença MP**. All authors approved the final version to be published and assume responsibility for the accuracy and integrity of all its content.

Data availability

The authors declare that the data are available in full within the article. The research dataset can be requested from the corresponding author.

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