

## CONSTRUCTION OF A CALENDAR FOR PEOPLE WITH HYPERTENSION FOR SELF-CARE IN THE HOSPITAL - HOME TRANSITION

Construção de calendário à pessoa com hipertensão para o cuidado/ autocuidado na transição hospital – domicílio

Construcción calendario para personas con hipertensión para el autocuidado en el hospital - transición domiciliaria

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### ABSTRACT

**Objective:** to describe the construction of an educational material in the form of a calendar for care/self-care for people with arterial hypertension in the transition from hospital to home. **Method:** methodological study based on criteria for the development of educational materials, scope review, health literacy and Andragogy principles. **Results:** construction of the illustrated calendar, with the themes: definitions of arterial hypertension; blood pressure values; technique for measuring blood pressure; strategies for controlling blood pressure; non-pharmacological and pharmacological treatment of hypertension and rights of the person with SAH. **Conclusion:** the construction of educational material in a calendar format for people with arterial hypertension in the transition from hospital to home can contribute to the continuity of care, with the potential for people to take better care of themselves.

**DESCRIPTORS:** Hypertension; Health education; Transitional care; Continuity of patient care; Nursing.

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## RESUMO

**Objetivo:** descrever a construção de um material educativo, em forma de calendário, para o cuidado/autocuidado às pessoas com hipertensão arterial no processo de transição hospital-domicílio. **Método:** estudo metodológico fundamentado em critérios para a elaboração de materiais educativos, na revisão de escopo, nos princípios da literacia em saúde e da Andragogia. **Resultados:** construção do calendário ilustrado, com os temas: definições da hipertensão arterial; valores da pressão arterial; técnica para a medida da pressão arterial; estratégias para o controle da pressão arterial; tratamento não farmacológico e farmacológico da hipertensão e direitos da pessoa com Hipertensão arterial. **Conclusão:** a construção do material educativo no formato de calendário às pessoas com hipertensão arterial no processo de transição hospital- domicílio pode contribuir para a continuidade dos cuidados, com potencial para a pessoa cuidar melhor de si.

**DESCRIPTORIOS:** Hipertensão; Educação em saúde; Cuidado transicional; Continuidade da assistência ao paciente; Enfermagem.

## RESUMEN

**Objetivo:** describir la construcción de un material educativo en forma de calendario para el cuidado/autocuidado de personas con hipertensión arterial en la transición del hospital al hogar. **Método:** estudio metodológico basado en criterios para el desarrollo de materiales educativos, revisión del alcance, alfabetización en salud y principios de andragogía. **Resultados:** construcción del calendario ilustrado, con los temas: definiciones de hipertensión arterial; valores de presión arterial; técnica para medir la presión sanguínea; estrategias para controlar la presión arterial; Tratamiento no farmacológico y farmacológico de la hipertensión y los derechos de la persona con HSA. **Conclusión:** la construcción de material educativo en un formato de calendario para personas con hipertensión arterial en la transición del hospital al hogar puede contribuir a la continuidad de la atención, con el potencial de que las personas se cuiden mejor a sí mismas.

**DESCRIPTORIOS:** Hipertensión; Educación en salud; Cuidado de transición; Continuidad de la atención al paciente; Enfermería.

## INTRODUCTION

Systemic Arterial Hypertension (SAH) corresponds to a multifactorial chronic condition characterized by high and sustained blood pressures greater than or equal to 140 mmHg and/or 90 mmHg in adults aged 18 years and older.<sup>1</sup>

It has gained prominence on the world scene due to its high incidence and prevalence, affecting 36 million people and contributing to the high number of hospitalizations, costly public spending, and significant loss of quality of life, with cardiovascular complications related to 29.8% of mortality in the country.<sup>1</sup>

Non-adherence to treatment of people with SAH has contributed to this reality<sup>2</sup>, reflecting the need to implement measures to reduce harmful lifestyle habits by encouraging the adoption of care and self-care practices in order to reduce complications and mortality.<sup>1</sup>

In this sense, health literacy, defined as “cognitive and social skills and people’s ability to gain access to understand and use information in ways that promote and maintain

good health”<sup>3,10</sup>, has been increasingly used in health education actions.

One should also pay attention to the fact that adults need a specific approach for the teaching-learning process, and in this direction, Andragogy has been used, a term that refers to adult guidance, based on the principles of active listening, shared experiences, learning contracts, and the formation of safe and reliable environments.<sup>4</sup>

In the health education process, nurses play a fundamental role, since they have an ethical commitment to disseminating knowledge, offering bases for meeting individual needs, seeking to recover health and maintain quality of life, teaching people to live with chronicity.<sup>5</sup>

In this sense, the context of hospitalization and transition of care configures itself as an important space for the development of constructive experiences and educational strategies, marked by humanization and trust, promoting the person’s capacity for self-management and self-care.<sup>6</sup> That said, the following question emerges: What educational strategies can be developed in the hospital-home transition process that can contribute to the care/self-care of people with Hypertension?

To answer this question, this study was developed with the objective of describing the construction of an educational material, in the form of a calendar, for the care/self-care of people with arterial hypertension in the process of hospital-home transition.

## METHOD

This is a methodological study. This method consists of the analysis, validation, and development of methods and research.<sup>7</sup>

For the construction of the educational material, the following criteria<sup>8</sup> were adopted: content, language, organization, layout, illustration, learning, and motivation. And also, for prioritizing health education actions for adults, the principles of health literacy<sup>3</sup> and andragogy were taken into account.<sup>4</sup>

The images were built by the main author, with the help of a programmer with training in information technology, from the freepik.com<sup>9</sup> database, and the principles of plagiarism were respected. The computer program Adobe Photoshop<sup>10</sup> was used for the construction of the calendar. As for learning and motivation, it is believed that the messages and illustrations can sensitize people to take better care of themselves.

To substantiate the content of the calendar, a Scope Review<sup>11</sup> was performed and the steps were followed:

- Step 1: Definition of the guiding question: What are the main guidelines for the person with SAH in the process of transition from hospital care to home care?
- Step 2: Literature base: A survey was conducted in electronic databases: Latin American and Caribbean Literature on Health Sciences (Lilacs), National Library of

Medicine (PubMed), Web of Science, in the virtual library Scientific Electronic Library Online (SciELO) and Google Scholar platform, with the descriptors “Hypertension”, “Health education”, “Patient discharge”, “Continuity of patient care” and “Nursing care”, and their correspondence in English and Spanish, associated, using the Boolean operator AND. Data collected in the period from August to September 2019, with the inclusion criteria: articles in Portuguese, English and Spanish, published in the last five years, with a quantitative approach, qualitative, systematic reviews, primary studies, meta-analysis and/or meta-synthesis. The descriptors had to be contained in the titles or abstracts, and the references were analyzed in search of other studies.

- Step 3: The abstracts were read and papers that contained information related to the definition of SAH, blood pressure values, techniques for measuring blood pressure, measures for pressure control, non-pharmacological treatment for SAH, pharmacological treatment for SAH, and the rights of people with SAH were selected.
- Step 4: The included texts were read in their entirety and key information was mapped for the composition of the educational material. The data were recorded in the database of the Excel program with the following information Title of the article, author, year of publication and results, composing the database of the review.
- Step 5: The information was analyzed and organized thematically, deductively, from the following themes: Definition of SAH; Blood pressure values; Technique for blood pressure measurement; Strategies for blood pressure control; Non-pharmacological treatment of SAH; Pharmacological treatment of SAH and Rights of the person with SAH. The international information was translated and readjusted to the national reality, respecting the legal restrictions and the guidelines were transformed into simple and objective language.
- Additionally, updated publications on the themes described in item 5 were surveyed in the publications of the Brazilian Society of Cardiology, the American Heart Association, and the Ministry of Health.

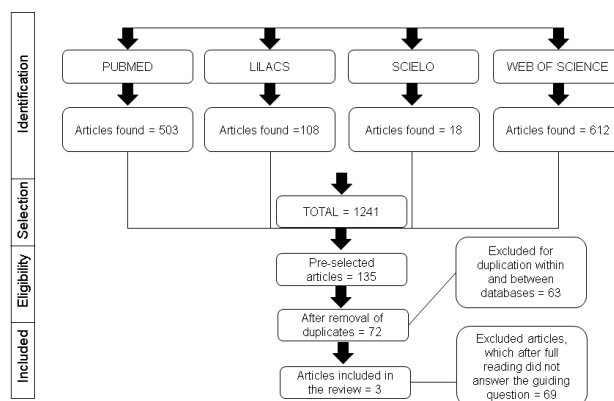
After this process, the guidelines were transcribed for each page of the calendar, highlighting the main commemorative dates and health care.

## RESULTS

With the purpose of making the transition of care from hospital to home with quality and effectiveness, an educational manual was built, in the form of a calendar, entitled: Care for the control of Systemic Arterial Hypertension: what you need to know!

From the scope review resulted 1,241 articles, which after reading and analysis, three articles were selected to compose the study<sup>12-14</sup>, which brought information regarding blood pressure values, BP measurement technique, pharmacological treatment, and the right of the person with SAH, as presented in figure 1.

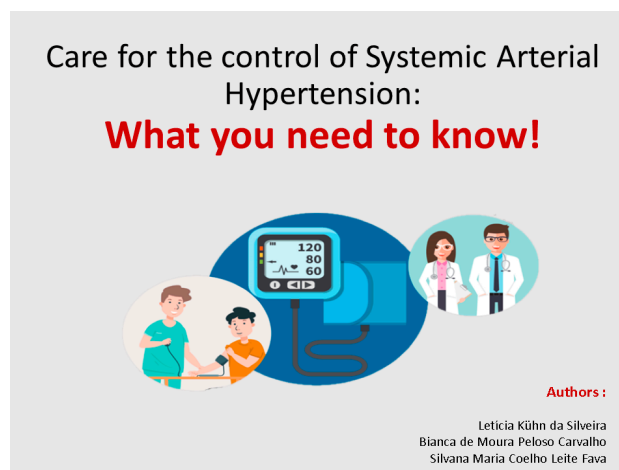
**Figure 1** - Adaptation of the Flow Diagram of the integrative review article selection process according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA)



Source: Galvão, Pansani, Harrad (2015)

The final version of the calendar is in the dimensions 10x15cm, spiral-bound, with 13 pages, printed in gray, blue, red and black, containing a cover that brings the title of the calendar and the authors, in the following pages, images and texts, as discriminated below:

**Figure 2** - Cover of the calendar for people with SAH for care/self-care in the transition hospital - home. Alfenas, MG, Brazil, 2020.



**Figure 3 - Calendar for the person with SAH for care/self-care in the hospital-home transition from January to April.** Alfenas, MG, Brazil, 2020.



**Figure 4 - Calendar for the person with SAH for care/self-care in the hospital-home transition from May to August.** Alfenas, MG, Brazil, 2020.



**Figure 5 - Calendar for the person with SAH for care/self-care in the hospital-home transition from September to December.** Alfenas, MG, Brazil, 2020.



Regarding the organization of the calendar, we chose to relate the information contained in the literature to

commemorative dates, to emphasize some themes, avoiding religious dates, as presented below: January: emphasis on the 1st day, which is commemorated as Universal Fraternization Day. Brings information about the definition of SAH and highlights the importance of peace to control stress. February: prioritized the Carnaval celebration. The orientations reinforce the importance of reducing alcoholic beverage consumption. March: prioritized the 31st, National Health and Nutrition Day. Healthy eating orientations were proposed. April: the 26th was chosen as the National Day for Prevention and Fight against Hypertension. The importance of care to perform self-measurement of blood pressure was emphasized. May: selected the 5th, National Day for the Rational Use of Medication, brings recommendations for care with the consumption of medications. June: the 9th of June was selected, National Immunization Day, to reinforce the importance and the right of the person with a chronic condition to be immunized. July: the 20th was chosen, National Day of the friend and of friendship. The importance of family and friends' support for blood pressure control and family involvement in care was emphasized. August: the 29th was defined as the National Day for the Fight against Smoking, with orientations to abandon the habit of smoking. September: selected the 1st, Day of the Physical Education Professional, to encourage the practice of physical activity. October: chose the 16th, Science and Technology Day, with orientations about the use of technologies that can help control BP. November: the 14th day was chosen, World Diabetes Mellitus Day. The orientations prioritized the control of glycemia. December: the 10th was selected, National Human Rights Day, highlighting the rights of the person with Systemic Arterial Hypertension.

As for the language, simple everyday words and terms were adopted, with affirmative and non-prescriptive expressions. For the layout, the color gray was used as the calendar background. The odd months of the year were written in blue letters, and the even months in red. For the information referring to the transition-hospital-home orientation, black font was used.

## DISCUSSION

Incipient knowledge about chronic conditions is among the main factors that contribute to non-adherence to treatment<sup>5</sup>, and orientations during hospital discharge are a practice that is still little performed.<sup>15</sup>

In this sense, the use of a calendar becomes an innovative practice to change this scenario, as it enables the creation of a bond and allows the clarification of doubts, because it is produced in simple everyday language, reaching people of different schooling levels, allows the dissemination of specific knowledge, in addition to being a support tool during nursing consultations.<sup>16</sup>

In the hospital discharge process, it is fundamental that the person receives orientation about the access to public health services, his/her rights and duties,<sup>12</sup> the use of medications, measures for stress control and weight reduction, the

restriction of saturated fat, sodium, and alcoholic beverages consumption, smoking cessation, and encouragement to physical activity.<sup>1,13</sup>

These lifestyle habits contribute to increased blood pressure and the onset of complications. Alcohol abuse and cigarette smoking contribute closely to increased blood pressure.<sup>1</sup> Furthermore, eating habits are directly related to the development of SAH.<sup>17</sup> Excessive salt intake in people with predisposition promotes vasculotoxic effects, leading to SAH.<sup>18</sup> Sedentary lifestyle is a risk factor for SAH. It was found that 38.6% of people with an increased abdominal circumference had a BP higher than 140x90 mmHg.<sup>19</sup>

Therefore, a balanced diet is recommended, as well as physical activity with aerobic exercises such as walking, cycling, swimming, running, and dancing, and handgrip exercises<sup>13</sup>, since they have a hypotensive effect and reduce risk factors such as obesity, dyslipidemia, and decrease in abdominal circumference.<sup>14,20</sup> However, if BP is above 160x105 mmHg, physical activity should not be performed.<sup>21</sup>

In addition to these, affective human relationships involving friends and family constitute important support for the person's process of adaptation to the disease and for the favorable environment for health practices.

Pharmacological therapy should be encouraged and used as prescribed. The main difficulties for non-adherence are low income, use of more than one antihypertensive, difficulty in reading the packages<sup>23</sup>, and also the lack of reconciliation or changes in medication during the hospitalization process<sup>12</sup>, which points to the need for adequate care planning.

The rights of the person with SAH<sup>12</sup> should be reinforced, among them to be immunized<sup>24</sup>; to encourage the practice of self-measurement of BP, and to provide guidance about the care required to obtain reliable data<sup>12,25</sup>, such as resting for five to ten minutes in a calm environment, not having a full bladder and legs crossed, not having practiced physical activities, not having drunk alcoholic beverages or coffee in the last 60 minutes, and not having smoked in the last 30 minutes. They should be leaning back in their chair, with their arms at heart level, and should be wearing an appropriate brace and manquito.<sup>1</sup>

In addition, they should be informed about the availability of mobile applications as an innovative means to record BP measurements and/or assist in the use of medications due to their popularization and easy access to the Internet.<sup>26</sup> However, it should be taken into account that many applications related to SAH are not scientific in nature, so the advice of a health professional is essential.<sup>27</sup>

Moreover, the coexistence of SAH and diabetes mellitus is significant and promotes functional, biochemical, and anatomical changes in heart cells, acting as a cardiotoxic factor and increasing the chances of cardiovascular events, which reinforces the importance of self-care in the face of these comorbidities.<sup>28</sup>

Given the relevance of these guidelines for SAH control, it is essential that health education actions are developed in

the hospital-home transition process by nurses, based on the integrality of care, so that the person understands about their disease process and has the basis for self-care practices.<sup>29</sup>

The written orientations contribute to avoid forgetfulness, to provide greater safety, quality, satisfaction, and adherence to treatment, as they act as mediators in the relationship between the ill person and the health professional, resulting in improved quality of life despite the coexistence with the chronic condition.<sup>30</sup>

## CONCLUSION

The hospital-home transition process constitutes an important space for the implementation of health education actions, and the nurse is fundamental in this process. The construction of educational material seeks to enable the continuity of care, the articulation with counter-referral services and the implementation of a communication process capable of stimulating the potential of people to take better care of themselves, reducing complications and readmissions due to SAH.

The production of knowledge related to the orientation of the person with SAH in the process of transition from hospital to home is incipient, which makes this study an important contribution to science. Thus, the proposed construction of this educational material in the form of a calendar, written in clear and objective language, illustrated and with everyday themes, may be a way to stimulate the autonomy of the person with SAH towards healthier habits, adherence to treatment and, consequently, reduction of complications and readmissions. This material can be used by health professionals as a strategy for the health education process.

It is unquestionable the presence of several booklets with guidelines for people with SAH. However, we did not find a material in the form of a calendar aimed at the person with SAH in the process of transition-hospital-home. The scarcity of articles related to health education for people with SAH in the process of transition from hospital to home can be considered a limitation of the study.

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