Health education strategies for promoting self-care among a group of hypertensive patients

ARTICLE

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Abstract
Systemic arterial hypertension (SAH) is an important public health problem, recognized as a risk factor for cardiac and cerebrovascular complications. This report describes the actions resulting from the participation of a Resident of the Multiprofessional Residency in Primary Care in leading a group of hypertensive users in a family health unit. The methodology was based on carrying out educational interventions with health strategies in the municipality of Caicó, in the state of Rio Grande do Norte. Participants showed active participation, favoring the collective construction of knowledge. The results indicated that the activities were beneficial in raising awareness among users about self-care, the promotion of healthy habits, and the importance of proper follow-up. In this sense, this experience is relevant for raising awareness among hypertensive patients about adopting healthy habits and the need for proper monitoring.

Keywords: Hypertension. Quality of life. Healthy Lifestyle. Primary Health Care.

Estratégias de educação em saúde para promoção do autocuidado com um grupo de usuários hipertensos

Resumo
A hipertensão arterial sistêmica (HAS) é um importante problema de saúde pública, reconhecida como fator de risco para complicações cardíacas e cerebrovasculares. Este relato descreve as ações decorrentes da participação de um Residente da Residência Multiprofissional em Atenção Básica na condução de um grupo de usuários hipertensos em uma unidade de saúde da família. A metodologia foi baseada na realização de intervenções educativas com estratégias de saúde no município de Caicó, no estado do Rio Grande do Norte. Os participantes demonstraram participação ativa, favorecendo a construção coletiva de conhecimento. Os resultados indicaram que as atividades foram benéficas para a conscientização dos usuários sobre o autocuidado, a promoção de hábitos saudáveis e a importância do acompanhamento adequado. Nesse sentido, a presente experiência mostra-se relevante para promover a...
conscientização dos hipertensos quanto à adoção de hábitos saudáveis e à necessidade de monitoramento adequado.

**Palavras-chave:** Hipertensão. Qualidade de vida. Estilo de Vida Saudável.
Atenção Primária à Saúde.

1 **Introduction**

Systemic arterial hypertension (SAH) is a complex clinical condition characterized by high and sustained levels of blood pressure, often associated with functional and/or structural alterations in target organs such as the heart, brain, kidneys and blood vessels, as well as metabolic alterations. This condition is closely related to a significant increase in both fatal and non-fatal cardiovascular events (Barroso et al., 2020).

Several risk factors associated with SAH are directly related to lifestyle, including a diet high in fat and sodium, and low in fiber, which can lead to obesity and consequently raise blood pressure. In addition, unhealthy behaviors such as smoking, a sedentary lifestyle, excessive alcohol intake and psycho-emotional stress can also contribute to the development of this condition (Barroso et al., 2020).

SAH affects 30% to 40% of the world's population, and in Brazil, its prevalence varies between 22.3% and 43.9%, with a higher incidence in elderly individuals, affecting more than 60% of this population (Mahajan, 2014). Furthermore, control rates among people with hypertension remain low, ranging between 18% and 23%, and are lower for men than women (NCD-RisC, 2021). Thus, it becomes imperative to implement measures to prevent and treat hypertension, such as sustained lifestyle changes, practicing regular physical activity, adopting a healthy diet, reducing body weight and stopping smoking (Barroso et al., 2020).

Despite the widespread recommendation for hypertensive patients to practice physical exercise, there is the problem that the elderly still do not adopt this practice very much, as around 70% of them do not meet the minimum weekly physical activity guidelines, which consist of 150 minutes of moderate activity and/or 75 minutes of vigorous activity per week (Mahajan, 2014). Faced with this reality, it is important to make efforts to develop strategies that promote greater engagement of elderly hypertensive patients in the regular
practice of physical exercise and lifestyle changes. In this context, health education emerges as a consistent alternative to promote well-being and guarantee the fundamental rights of these individuals through collective interventions aimed at families and communities (Einloft; Lima; Borges, 2014).

According to the World Health Organization (WHO), health education is understood as the combination of actions and planned learning experiences, with the aim of enabling people to acquire knowledge about the determinants and behaviors related to health. This education is an indispensable tool that health workers must adopt in order to provide comprehensive care to individuals with hypertension (Azevedo; Silva; Gomes, 2017).

Through health education, it is possible to generate opportunities for reflection on health, care practices and lifestyle changes, which is one of the pillars of health education. The role of the educator in the multi-professional team that develops actions with patients with hypertension is to guide them towards self-care (Azevedo; Silva; Gomes, 2017).

Thus, the process of health education gives people access to information that helps them make informed decisions and encourages them to take responsibility for their own health (Einloft; Lima; Borges, 2014). It is precisely because of this conception of health education that the group becomes a strategic action. Working in a group implies the existence of bonds between members, communication, a common goal, interdependent relationships and the existence of affections between participants. It also opens up creative processes, as it allows interaction with others and is a trend that combines hierarchy with the totality of the different group members (Favoreto; Cabral, 2009).

In this way, the development of group, integrated and multidisciplinary actions that include health workers, users and family members could stand out as potential auxiliary strategies for promoting the regular practice of physical exercise and the adoption of a healthier lifestyle in elderly hypertensive patients.

In view of this, the aim of this article is to describe the health education actions resulting from the participation of a Resident of the Multiprofessional Residency in Primary Care in leading a group of hypertensive users in a family health unit.
As for the structure of the article, the introduction section is followed by a methodological section describing the procedures adopted. After this, the results are systematically presented and discussed according to the research objectives, focusing on the four moments of the intervention and identifying the main trends. The concluding remarks emphasize the theoretical and practical implications, suggesting avenues for future research.

2 Methodology

This is a descriptive study based on the participatory research of a resident of the Multiprofessional Residency Program in Primary Care, on the development of health education activities for hypertensive patients.

Participant observation is a research tool that stands out for the immersive, frequent and prolonged involvement of the researcher with social actors in a community or environment studied in order to gain a deep understanding of social phenomena. It requires systematic observation and the acquisition of skills such as relationship building and cultural sensitivity. The process usually includes several stages: initial immersion and relationship building, gaining a holistic understanding of the community or environment, systematic data collection through observations and rigorous analysis of the data collected to uncover patterns and insights (Queiroz et al., 2007).

The action took place in a basic health unit, located in the municipality of Caicó, Rio Grande do Norte, in northeastern Brazil, in 2021, with the participation of hypertensive patients from all the micro-areas that make up the respective Health Unit.

The participants were 16 people aged between 60 and 85, 11 women and five men, selected on the basis of an affirmative response to an invitation made by community health workers during home visits.

The team responsible for carrying out the multi-professional activities with the hypertensive group was made up of six professionals: a nurse, a psychologist, a physiotherapist, a nutritionist, a physical education professional and a dentist.
Data was collected throughout the sessions and in preparation for them, in 2021, between the months of May and October. The ethical precepts of research were followed, with the express consent of the participants and the signing of an informed consent form.

3 Results and Discussion

From the experience of the Multiprofessional Residency Program in Primary Care, together with the workers at the basic health unit, it was possible to observe, through home visits and territorialization, a high number of hypertensive users in the territory in question. Given this diagnosis, a team meeting was held to develop an effective intervention proposal. The health education group for hypertensive patients was created in the second half of 2021.

Group work plays an extremely important role as it is a collaborative approach that enables continuous and enriching training. In it, participants have the opportunity to share their individual experiences, while at the same time giving new meaning to the knowledge they have already acquired, thus boosting the personal development of each member involved. This interaction enables those involved to keep up to date with relevant issues and, in a more structured way, analyze their daily practices, seeking joint and effective solutions to the challenges they face (Paixão; Oliveira; Castro, 2022).

The intervention consisted of four meetings, which were attended by hypertensive patients registered in the Family Health Strategy and invited by the community health agents. At each meeting, blood pressure was taken at the beginning and the mediators and other residents of the team were introduced.

The first meeting took the form of a round table discussion led by the resident nutritionist, in which the topic of healthy eating and what should be avoided in the SAH was addressed. At the start of the round table, the dynamics of the round table were explained so that everyone could pay attention, have their doubts answered, share experiences, etc. During the round table discussion, subjects such as the harmful effects of salt and fatty foods and how to prepare food without using industrialized seasonings were discussed.
According to Vieira et al. (2021), dietary practices are associated with conditions of greater self-care and follow-up in the population. However, according to the authors, medical guidance on diet is daily evaluated as unsatisfactory by users, which reinforces the need to strengthen food and nutrition actions in primary care as allies for reducing morbidity, better control and prognosis.

The second meeting dealt with the benefits of physical activity in hypertension. The activity was led by a physiotherapist and a physical education professional, both residents. At first, they discussed the concept of hypertension, its pathophysiology, classification and risk factors, using language that was simple, understandable and appropriate to reality. Secondly, a playful activity was carried out using active methodologies, through a game entitled: Knowing Hypertension Through Figures.

The game took place as follows: two boxes were placed on the table and labeled with the following phrases: "Allowed" and "Avoid/Prohibited". Next, each participant was given cards containing images about lifestyle and eating habits. They were instructed to place them in the box with the phrase they thought was most appropriate, according to their knowledge of healthy lifestyle habits and proper nutrition for hypertensive patients. Afterwards, the facilitators answered any questions and indicated the appropriate cards for each box.

In the third moment, stretching and active joint mobilization were carried out, as well as breathing exercises with all the participants.

One of the forms of non-pharmacological intervention for the control and prevention of SAH is physical exercise. Physical exercise promotes a series of physiological responses resulting from autonomic changes that influence the cardiovascular system, with a beneficial effect on blood pressure (Heckstedem; Grutters; Meyer, 2013). In this way, physical exercise plays an important role as a non-drug element for controlling blood pressure.

After a single session of physical exercise, whether aerobic or dynamic resistance, it is possible to observe a response called Post-Exercise Hypotension (PEH), characterized by a reduction in blood pressure during the recovery period. This reduction is perceived by
observing post-exercise blood pressure values that are lower than pre-exercise values or the values analyzed on a control day without exercise. Although PEH is an acute phenomenon, it is clinically relevant when its magnitude is significant and persists for several hours, reducing the hypertensive patient's blood pressure levels over a long period (Heckstedem; Grutters; Meyer, 2013).

The third meeting covered general oral health care, led by the resident dentist, as well as the relationship between anxiety and hypertension, and pharmacological and non-pharmacological ways of controlling anxiety. Firstly, guidance was given on the correct use of dental floss and the complications caused by not using it, such as the build-up of tartar and, consequently, the formation of periodontal disease, such as gingivitis and periodontitis. They were also taught the correct way to brush, the stages of tooth decay formation and the consequences of the final stages of decay, such as reversible and irreversible pulpitis, in the latter of which the patient may even lose the tooth through extraction. Another important piece of advice was on how to choose the ideal toothbrush in the supermarket, which should have a straight handle, straight bristles, extra soft or soft bristles, as well as a small head, all of which provide better hygiene of the oral cavity.

The second session was led by the resident psychologist and nurse. The nurse spoke about the relationship between anxiety and high blood pressure, highlighting in particular how the nervous system works in blood circulation. They also explained the ways of treating anxiety, both pharmacologically and non-pharmacologically.

The psychologist then gave general information about anxiety and how it affects the body, the harmful effects of anxiety and how it affects the individual. Finally, the psychologist gave the participants a moment of relaxation, using guided breathing, which can also be used in times of anxiety.

Anxiety and depression are well-known risk factors for the onset and worsening of systemic arterial hypertension (Ulguim et al., 2022). In this sense, various mind-body practices, such as yoga and meditation, which evoke the relaxation response, have been shown to reduce blood pressure by inducing an anti-stress effect and can be
complementary to antihypertensive drug therapy, with the added benefit of having no side effects (Manoj et al., 2018).

In the fourth and final meeting, individual appointments were held with the group participants, shared between the doctor, nurse, psychologist and physiotherapist, in order to meet the individual demands of each patient. One shift was allocated exclusively to participants in the hypertension group. The professionals listened to each patient’s complaints and provided guidance on their needs. In addition, active listening was carried out and guidance was given on the importance of health care. For some patients, it was necessary to adjust the doses of the drugs used, and for others, some drugs were discontinued, new ones were prescribed and complementary tests were requested for additional assessments.

The intervention made it possible to reflect on the fact that systemic arterial hypertension remains an important public health problem and one that permanently requires ongoing measures to control and prevent its complications. Educational activities in health were proposed, using active methodologies, which consist of bringing the user to the center of the teaching process, making them the protagonist and builder of their own knowledge (Santos; Castaman, 2023).

At each session with the group, the team of residents developed didactic methods with playful resources in order to make it easier for the population to understand. At the end of each health education approach, an evaluation was carried out to check that the method used had been effective.

All the subjects covered were structured into topics, such as: concepts, signs and symptoms, treatment and, above all, forms of prevention, with the aim of stimulating conscious decision-making and awakening the user’s self-care in the health-disease process.

For McCormack et al. (2021), self-care skills, understood as the ability to take care of oneself, and self-care strategies, understood as the strategies adopted to promote holistic well-being, are two key concepts related to the concept of self-care. The latter is
therefore an imperative for personal health, support for continuing to care for others and for professional growth.

According to Lorig and Holman (2003), self-care encompasses various behaviors and skills with the aim of promoting health and well-being, preventing illness and managing existing health conditions. For the authors, there are three fundamental self-care tasks involving medical management, role management and emotional management, which are considered essential for individuals to effectively manage their health conditions.

Self-care in health, in turn, is a continuous practice that involves the individual in making decisions about their own health and is fundamental for promoting health and preventing chronic diseases. According to the World Health Organization (WHO) definition, self-care is the set of actions carried out by a person to maintain their health and well-being, as well as to prevent, treat and control diseases (WHO, 2023). Self-care promotion measures include assessment and education practices to enable users to reduce morbidity, mortality and health costs, as well as restoring health, independent living and well-being (Regel; Jaarsma; Strömberg, 2019).

According to Ferreira, Bodevan and Oliveira (2019), the participation of users in hypertension care is fundamental, whether through the continuous and adequate use of medication or through the adoption of a healthier lifestyle. Ultimately, these practices contribute to reducing the risk of complications, with a lower burden on the health system and a better quality of life for individuals.

Thus, it was possible to observe that with each intervention and round table discussion, users actively participated in the production of self-care, asking questions, favoring collective learning between professionals and users. After each intervention, we observed the users’ motivation to continue, and we received positive feedback in which the users reported that the guidance was valuable and contributed to raising awareness and encouraging a change in lifestyle.

In this way, it was possible to see that health education remains an extremely valuable working tool, which can bring knowledge to users so that they can become the protagonists of their own care. When applied to groups of hypertensive patients, this
approach can provide clear and objective information about the disease, associated risk factors, preventive measures and available treatments. This allows patients to understand the importance of self-care and to be encouraged to adopt effective measures to know and control their blood pressure, thus contributing to the prevention of future complications.

4 Conclusions

The health education activities were relevant, as they provided qualified listening and made it possible to identify other problems associated with systemic arterial hypertension and lifestyle habits that are detrimental to quality of life. Through these activities, it was possible to develop health promotion actions that go beyond conventional care.

The participants reported positive feedback, indicating that the guidance provided contributed to improving their lifestyle, including dietary changes, incorporating physical activity into their daily routine and attending routine appointments and examinations more frequently.

The interventions implemented, although comprehensive, were limited in scope and duration, demonstrating the need for ongoing efforts to combat systemic hypertension. However, the Multiprofessional Residency Program in Primary Care served as a vital platform for promoting collaborative approaches, enabling continuous learning and fostering personal development among participants. This underscores the fundamental role of group dynamics in shaping a holistic understanding of health practices and driving effective, interdisciplinary solutions to the challenges encountered.

In this way, the interventions had a significant impact on raising patients’ awareness of healthy habits and controlling anxiety, thus improving their quality of life. In view of this, it can be concluded that the health education activities generated significant benefits, sensitizing users to the importance of self-care.

Therefore, the interaction between education and health directly affected the individuals’ ability to acquire and apply knowledge. Thus, collaborative efforts between the
education and health systems are imperative to meet the holistic needs identified, enhancing personal development and general well-being. Investing in initiatives that integrate these aspects can lead to better educational outcomes and the development of healthier, more resilient individuals capable of facing the challenges of the modern world.

References


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