

DOI: <https://doi.org/10.36489/saudecoletiva.2021v11i67p6667-6676>

Educational intervention for hypertensive elderly: an experience report

Intervención educativa para ancianos hipertensos: informe de una experiencia

Intervenção educativa para idosos hipertensos: um relato de experiência

ABSTRACT

OBJECTIVE: To describe the experience of educational health intervention for the control of arterial hypertension (SAH) in the elderly. **METHODS:** Descriptive study, type of experience report, of educational intervention actions developed with a group of hypertensive elderly people, between March and July 2019 in a UBS in the city of Paulistana - PI. **RESULTS:** 8 meetings were held: three lectures on healthy eating habits in the control of blood pressure levels; three nutritional consultations with their respective follow-ups and returns and two educational workshops. There was a prevalence of females, with low education, low income and married. Continuous and participatory health and nutritional education strategies, with reference to the reality of the population served, are essential for changing eating behavior and lifestyle. **CONCLUSION:** It appears that there is a need for continuous educational activities focused on promoting the health of hypertensive elderly people, as these, consequently, can maintain adequate blood pressure levels.

DESCRIPTORS: Arterial Hypertension; Primary Health Care; Health Education; Health Promotion; Elderly.

RESUMEN

OBJETIVO: Describir la experiencia de intervención educativa en salud para el control de la hipertensión arterial (HAS) en ancianos. **MÉTODOS:** Estudio descriptivo, tipo de relato de experiencia, de acciones de intervención educativa desarrolladas con un grupo de ancianos hipertensos, entre marzo y julio de 2019 en una UBS de la ciudad de Paulistana - PI. **RESULTADOS:** Se realizaron 8 reuniones: tres charlas sobre hábitos alimentarios saludables en el control de los niveles de presión arterial; tres consultas nutricionales con sus respectivos seguimientos y devoluciones y dos talleres educativos. Hubo un predominio de mujeres, con baja educación, bajos ingresos y casadas. Las estrategias continuas y participativas de educación en salud y nutrición, con referencia a la realidad de la población atendida, son fundamentales para cambiar la conducta alimentaria y el estilo de vida. **CONCLUSIÓN:** Parece que existe la necesidad de actividades educativas continuas enfocadas a promover la salud de los ancianos hipertensos, ya que estos pueden, consecuentemente, mantener niveles adecuados de presión arterial.

DESCRIPTORES: Hipertensión; Atención Primaria de Salud; Educación para la Salud; Promoción de la Salud; Ancianos.

RESUMO

OBJETIVO: Descrever a experiência de intervenção educativa em saúde para controle da Hipertensão Arterial (HAS) em idosos. **MÉTODOS:** Estudo descritivo, tipo relato de experiência, de ações de intervenção educativas desenvolvidas com um grupo de idosos hipertensos, entre março a julho de 2019 em uma UBS no município de Paulistana - PI. **RESULTADOS:** Foram realizados 8 encontros: três palestras sobre hábitos alimentares saudáveis no controle dos níveis pressóricos; três atendimentos nutricionais com os seus respectivos acompanhamentos e retornos e duas oficinas educativas. Houve prevalência do sexo feminino, de baixa escolaridade, baixa renda e casadas. As estratégias de educação em saúde e nutricional contínuas e participativas, com referência à realidade da população atendida é primordial para a mudança de comportamento alimentar e do estilo de vida. **CONCLUSÃO:** Constata-se, a necessidade de atividades educacionais contínuas com foco na promoção da saúde de idosos hipertensos, uma vez que estas, podem consequentemente manter níveis pressóricos adequados.

DESCRIPTORIOS: Hipertensão Arterial; Atenção Primária à Saúde; Educação em Saúde; Promoção da Saúde; Idosos.

RECEIVED ON: 02/28/2021 APPROVED ON: 04/08/2021

Jocenara Firme de Moura Santos Martins

Nutritionist. Specialist in Clinical Nutrition and Family and Community Health from the Federal University of Piauí/UFPI. Paulistana (PI), Brazil.

ORCID: 0000-0003-4867-0049

Jéssika Roberta Firme de Moura Santos

Nurse. Master's Student of the Post Graduate Program in Science and Health at the Federal University of Piauí/UFPI. Picos (PI), Brazil.
ORCID: 0000-0003-1268-2400

Lívia de Araújo Rocha

Nutritionist. Master in Science and Health from the Federal University of Piauí/UFPI. Picos (PI), Brazil.
ORCID: 0000-0003-4595-410X

Maurilo de Sousa Franco

Nurse by the Federal University of Piauí/UFPI. Picos (PI), Brazil.
ORCID: 0000-0003-0808-3763

Luana da Silva Amorim

Nutrition Academic. Federal University of Piauí/UFPI. Picos (PI), Brazil.
ORCID: 0000-0001-7506-9334

Luisa Helena de Oliveira Lima

Nurse. PhD in Nursing. Associate Professor II at the Federal University of Piauí/CSHNB and at the Graduate Program in Science and Health. Leader of the Research Group on Innovation and Technology in Teaching and Health Care (ITECS)/UFPI/CNPq. Picos (PI), Brazil
ORCID: 0000-0002-1890-859X

INTRODUCTION

The Brazilian scenario is experiencing a marked increase in Chronic Non-Communicable Diseases (NCDs) as a result of the current transition in the demographic profile. ⁽¹⁾ In this scenario, it is worth mentioning Systemic Arterial Hypertension (SAH), characterized by a multifactorial clinical condition of high levels of blood pressure (BP) which may be related to changes in the structure or functionality of target organs, in addition to metabolic changes, which can generate a high risk of fatal and non-fatal cardiovascular events. ⁽²⁾

In the context of CNCDs, SAH has stood out as an important public health problem, with a national prevalence of 60% of cases in the elderly population. In addition, associated with Diabetes Mellitus (DM), they stand out as the main cause of hospitalizations in the Unified Health System (SUS - Sistema Único de Saúde) due to their vulnerability, which leads to the need for interventions to promote health, quality of life and prevention of these diseases, whose objective is to make the aging process active, self-sufficient and healthy. ^(1,3-5)

The World Health Organization (WHO) ratifies the incidence of SAH

being higher in the elderly, and it highlights inadequate eating habits as the main risk factor for its development. In view of this, in the follow-up of elderly patients with SAH, care should be planned and increased in order to encourage a healthy lifestyle, regular physical activity, and especially adherence to eating habits. Thus, one way to intervene for the control of SAH is the development of educational interventions. ⁽⁶⁾

It is ensured in the scientific literature that the positive effect of multi-competent interventions such as home visits, individual consultations and group educational sessions, including conscious changes in eating habits, physical activity and knowledge of the therapeutic regimen, are effective in reducing SAH injuries, as well as its prevention in the elderly population. ^(7,8)

It is of great importance to improve the quality of care for hypertensive patients, especially in primary health care, with a more comprehensive approach, with the objective of optimizing treatment adherence and providing more careful monitoring. ⁽⁹⁾

Within this panorama, educational actions are significant to compose a new vision of the health-disease process, paying attention to discussions about issues that result in possible decision-making and encouragement in the development of prac-

tices that ensure adherence to a healthier lifestyle of the elderly population. ⁽³⁾

Therefore, the development of educational interventions such as the one described in this study corroborate the actions to control SAH based on the promotion of healthy habits. It is believed that educational interventions become dialogue strategies between the professional-health service and the patient for the construction of autonomy and the management of the chronic condition, in the case of this experience of SAH.

This study aims to report the experience of health education actions in hypertensive elderly groups of a Basic Health Unit in the urban area of the city of Paulistana - PI, in order to control hypertension by encouraging the adoption of healthy eating habits.

METHODS

This is a descriptive study, of the experience report type, developed in the context of educational and nutritional intervention actions developed with a group of elderly hypertensive individuals. The activities were developed with practical application in a Basic Health Unit in the city of Paulistana - PI from March to July 2019.

For didactic purposes, the study was complemented in sequential stages: theoretical

studies of the SAH mechanism and intervention strategies; visit the UBS to form a bond and learn about the socio demographic situation, main difficulties in relation to drug treatment and practical application of educational and nutritional action tools.

Initially, the register of hypertensive elderly people was carried out, with socio-economic characterization, personal data, eating habits, medication (identification,

dose and time) in use in the treatment of SAH to support the elaboration of the intervention. The actions described in the operational plan (TABLE 1) were developed in weekly meetings in the morning day shift, totaling 8 (eight) meetings in groups with an average number of 10 to 13 participants.

As this is an experience report, the Informed Consent Form (ICF) was not used.

RESULTS

Eight meetings were held with the elderly group, distributed as follows: three dynamic and dialogued lectures on the benefits of healthy eating habits in controlling blood pressure levels; three nutritional consultations with their respective follow-up and return and two educational workshops "Sal de Ervas (Herbal Salt)".

Chart 1- Operational Plan of Educational and Nutritional Actions with the Elderly Group of UBS. Paulista (PI), 2019.

PROBLEM SITUATION	OBJECTIVES	GOALS / DEADLINES	ACTIONS / STRATEGIES	RESPONSIBLE
Training/Scenario Analysis	<ul style="list-style-type: none"> - Train volunteer academics on the theme of educational action (Group of elderly hypertensive individuals). - Create a bond with the community. - Recognize the main difficulties in adherence and maintenance of SAH treatment 	<ul style="list-style-type: none"> - Perform in March/2019. 	<ul style="list-style-type: none"> - Research in scientific literature on the theme of SAH in the elderly population. -Development of the operational plan of the educational/nutritional intervention. - Elaboration of an educational folder "HYPERTENSION". - Preparation of the "Sal de Ervas" Educational Workshop. 	<ul style="list-style-type: none"> - Nutritionist - Nurse - Volunteer Nursing and Nutrition Academics (Supervision by the Nutritionist/Nurse).
Inadequate Eating Habits of elderly hypertensive patients at the UBS in the city of Paulista (PI).	<ul style="list-style-type: none"> - Guide the group of elderly hypertensive individuals on the importance of adopting healthy eating habits as a non-drug treatment to control SAH. - Develop educational technology in the form of a folder. 	<ul style="list-style-type: none"> - Development of three educational lectures and exhibition of a video for the group of elderly hypertensive individuals and their families during the month of April/2019 addressing the benefits of healthy eating and the choice of healthy foods. - Development of educational technology - folder entitled "Hypertension" 	<ul style="list-style-type: none"> - Conducting educational/dynamic lectures and weekly video exhibition, lasting 60 minutes, during the month of April/2019 at the UBS headquarters, addressing the benefit of healthy eating habits. Meeting 1: measures associated with preparation, as well as guidelines to promote healthy eating for the elderly Meeting 2: Measures associated with the consumption of daily meals Meeting 3: Guidance on the benefit of healthy eating to control blood pressure, providing a healthy lifestyle and a better quality of life for the elderly hypertensive group. *Use of audiovisual resources - Distribution during the 3rd meeting at the UBS educational and illustrative folder for the elderly about the foods accepted in the control of SAH, as well as additional guidance (the concept of SAH, symptoms, risk factors and foods to be avoided and accepted in the diet). 	<ul style="list-style-type: none"> - Nutritionist - Nurse - Volunteer Nutrition and Nursing Academics (Nurse/Nurse Supervision). - Nutritionist - Nurse - Academic Nutrition and Volunteer Nursing (Supervision by the Nutritionist/Nurse).

- Provide adequate nutritional counseling for the elderly.	- Provide individual nutritional care from May to July/2019 to hypertensive elderly at UBS. - Carry out a nutritional return consultation for hypertensive elderly people.	- Carrying out nutritional care from May to July/2019 and the return of hypertensive elderly people at NASF I headquarters. - Food history; - Anthropometric Assessment; - Prescription and dietary plan guidance focused on changes impacting BP decrease, weight loss, increased fruit and vegetable consumption and reduced sodium intake. - Monitoring of dietary changes and anthropometric evolution.	- Nutritionist. - Academic of Nutrition (Supervised by the Nutritionist). - Nutritionist. - Academic of Nutrition (Supervised by the Nutritionist).
- Encourage the use of herbal salt as a seasoning option to help control SAH.	-Develop two "Sal de Ervas" Educational Workshops for hypertensive elderly people during the month of June and July/2019.	- During the month of June and July/2019, at the headquarters of UBS Lagoa, carry out two "Sal de Ervas" workshops, for the preparation and distribution of salt samples to hypertensive patients in replacement of conventional salt. - Acceptability of herbal salt by the hypertensive elderly group as a seasoning in food..	- Nutritionist - Nurse - Volunteer Nursing and Nutrition Academics.
-Blood Pressure (BP) Monitoring.	- Measure the Blood Pressure (BP) of the elderly registered in the group of hypertensive individuals participating in educational actions, from March to July/2019.	BP measurement of the elderly belonging to the elderly group during educational interventions (educational and dynamic lectures; distribution and counseling of the educational folder "Hypertension", Nutritional Care and Return and "Sal de Ervas" workshop).	- Nurse - Nursing Student (with supervision by the Nurse)

Source: Authors' data.

Initially, the main difficulties in adherence, maintenance and consequently the factors that interfered with the satisfactory outcome of the treatment of SAH in the elderly population were recognized, reaching the conclusion of the importance of concentrating on educational and nutritional actions and subsidizing the construction of the technology (folder) from the main points obtained in the recognition and first encounters with the elderly group.

The first meeting aimed to address the theme "Healthy Eating in the Elderly", based on the Manual Healthy Eating for the Elderly of the Ministry of Health, addressing measures associated with the preparation of daily meals, as well as guidelines to promote healthy eating for the elderly. The dynamics of a face-to-face educational session was used, with the use of audiovisual means (illustrations, videos, figures) providing a better understanding for the elderly public about the segments described as follows: care in the purchase and storage of food, hygiene care and food handling and food preparation care.

The second meeting dealt with "Measures Associated with Food Consumption",

addressing the following issues: choice of healthy food, discouragement of the use of salt at the table and adequate intake of liquids. The third meeting ended with the "Nutritional Guidelines focused on reducing Blood Pressure", an educational technology developed by the team of Nutritionists and Nurses was used as a way to assist the intervention, folder "Hypertension" with easy-to-understand language, built with the following sections, namely: direct approach to defining hypertension, signs and symptoms, risk factors, tips on healthy habits such as what to prefer and avoid in food in order to provide a better quality of life and a healthy lifestyle for elderly hypertensive patients, all the content established by the scientific literature.

In the next stage of the intervention, a workshop "Sal de Ervas" was held, which was distributed in two meetings with the aim of promoting interaction between the elderly and health professionals.

DISCUSSION

Continuous and participatory health

and nutrition education strategies, with reference to the reality of the population served, are essential for changing eating behavior and lifestyle in the short, medium and long term, as a means of overcoming low adherence to non-pharmacological treatment of SAH.⁽¹⁰⁾

Participation in the intervention was similar to those found in other studies, which indicate the largest audience of educational actions being composed of females, with low education and low income, and married.⁽¹¹⁻¹³⁾

With regard to gender, women, in turn, have a greater predisposition to self-care, search for the health service and perception of diseases, thus having high levels of incidence of SAH in relation to the male public.⁽¹⁴⁾

Regarding the first meeting, the theme "Healthy Eating among the Elderly" was addressed, aspects related to the nutrition of the elderly are results reflected from the physiological process such as the anatomical and functional changes of aging itself. Given this, the importance of a balanced, rich and varied diet in the

quest to contribute to greater longevity with quality of life. ⁽¹⁵⁾

Therefore, among the approaches to the treatment of hypertension, changes in lifestyle, consisting of changes in diet and increased physical activity, are effective in reducing blood pressure, preventing hypertension and its sequelae. ⁽⁸⁾ This demonstrates the need to fundamentally work on the continuous development of actions aimed at social determinants of health, especially in the most vulnerable populations. ⁽¹⁶⁾

Attention is paid to the various types of educational technologies listed in the literature, which are expository, dialogued, audiovisual, tactile and printed, such as the

Educational Folder “Hypertension”, distributed at the end of the third meeting, have been indicated as a significant promoter of health and effective in promoting healthy eating habits in SAH as well as a valuable instrument of professional and population interaction. ⁽⁴⁾

Pharmacological treatment alone does not control blood pressure figures, due to poor lifestyle and eating habits, as daily exposure to some factors, such as excessive sodium consumption, low potassium intake, overweight, obesity, sedentary lifestyle and intake of alcohol increase blood pressure gradually. ⁽¹⁷⁾ Still, Malachias et al., ⁽¹⁸⁾ brings that people generally do not associate these

aspects as a risk factor for this disease, thus contributing to the high prevalence and lack of control.

CONCLUSION

As this is a more vulnerable group and often with several limitations, educational interventions are essential to change not only eating habits, but also change the adoption of risk attitudes, thus directly influencing the health of this population, especially for blood pressure control. However, the importance of carrying out activities such as these for the promotion of health in old age is highlighted. ■

REFERENCES

- Soares EMF, Moraes GLA, Feitosa JÁ, Pessoa PMD, Oliveira VS. Influência do bem-estar psicossocial do idoso no enfrentamento de adversidades em saúde: relato de experiência. *Saúde Coletiva*. 2020; 10(59): 4162-4166.
- Cardoso FN, Domingues TAM, Silva SS, Lopes JL. Fatores de risco cardiovascular modificáveis em pacientes com hipertensão arterial sistêmica. *REME - Rev Min Enferm*. 2020; 24:e-1275. DOI: 10.5935/14152762.20200004
- Azevedo PRA, Sousa MM, Sousa NF, et al. Ações de educação em saúde no contexto das doenças crônicas: revisão integrativa. *Rev Fund Care Online*. 2018; 10(1):260-267. DOI: <http://dx.doi.org/10.9789/2175-5361.2018.v10i1.260-267>
- Santos LF, Silva RC, Santos NSS, Mutti CF, Oliveira LMAC. Participation in a group and quality of life in hypertensive perspectives. *J Nurs UFPE On Line [Internet]*. 2016; 10(8):2886-94. DOI: <http://dx.doi.org/10.5205/1981-8963-v10i8a11357p2886-2894-2016>
- Silva KM, Santos SMA, Souza AJJ. Reflexões sobre a Necessidade do Cuidado Humanizado ao Idoso e família. *Sau. & Transf. Soc*. 2014;5(3):20-4.
- Afonso VLM, Garcia RR Sinato, CM, Nascimento RG, Carmo FS. Educação em saúde e estratégias utilizadas para prevenção e controle da hipertensão arterial com idosos. *Revista Baiana de Saúde Pública*. 2018; 42(2): 368-381 DOI: 10.22278/2318-2660.2018.v42.n2.a2458
- Jafar TH, Gandhi M, de Silva HA, Jehan I, Naheed A et al. A Community-Based Intervention for Managing Hypertension in Rural South Asia. *New England Journal of Medicine*. 2020; 382(8), 717-726. DOI <https://doi.org/10.1056/NEJMoa1911965>
- Oparil S, Acelajado MC, Bakris GL, Berlowitz DR, Cifková R, Dominiczak AF, Grassi G, Jordan J, Poulter NR, Rodgers A, Whelton PK. Hypertension. *Nat Rev Dis Primers*. 2018 Mar 22;4:18014. DOI: 10.1038/nrdp.2018.14. PMID: 29565029; PMCID: PMC6477925.
- Nobre ALCSD, Lima CDA, Oliveira MJLD, Vieira DDMA, Martelli Júnior H, Costas SDM. Hipertensos assistidos em serviço de atenção secundária: risco cardiovascular e determinantes sociais de saúde. *Cadernos Saúde Coletiva*, v. 28, n. 3, p. 334-344, 2020.
- Machado Juliana Costa, Cotta Rosângela Minardi Mitre, Moreira Tiago Ricardo, Silva Luciana Saraiva da. Análise de três estratégias de educação em saúde para portadores de hipertensão arterial. *Ciênc. saúde coletiva [Internet]*. 2016; 21(2): 611-620. DOI: <http://dx.doi.org/10.1590/1413-81232015212.20112014>.
- Ferreira DN, Matos DL, Loyola AI Filho. Ausência de consulta médica de rotina entre idosos hipertensos e/ou diabéticos: um estudo epidemiológico baseado na Pesquisa Nacional por Amostra de Domicílios 2008. *Rev Bras Epidemiol*. 2015;18(3):578-94.
- Mendes TAB, Goldbaum M, Segri JN, Barros MBA, César CLG, Caramina L. Factors associated with the prevalence of hypertension and control practices among elderly residents of São Paulo city, Brazil. *Cad Saúde Pública*. 2013;29(11):2275-86.
- Dias EG, Silva EJJ, Lima FN, Anjos ECF, Alves JCS. Caracterização dos hipertensos e fatores dificultadores na adesão do idoso ao tratamento medicamentoso da hipertensão. *Rev Interdisciplin*. 2015;8(3):39-49.
- Almeida AV, Mafra SCT, Silva EP, Kanso S. A feminização da velhice: em foco as características socioeconômicas, pessoais e familiares das idosas e o risco social. *Textos Contextos*. 2015;14(1):115-31.
- Moreira RP, Ferreira GO, Felício JF, Lima PA de, Gomes TF, Oliveira FBB de. Educação em saúde no domicílio de idosos hipertensos e diabéticos. *Rev enferm UFPE on line*. 2020;14: e 245034 DOI: <https://doi.org/10.5205/1981-8963.2020.245034>.
- Andrade SSSDA, Stopa SR, Brito AS, Chueri PS, Szwarcwald CL, Malta DC. Self reported hypertension prevalence in the Brazilian population: analysis of the National Health Survey, 2013. *Epidemiol Serv Saude*, v. 24, n. 2 p. 297-304, 2015.
- Poulter NR, Prabhakaran D, Caulfield M. Hypertension. *Lancet*, v. 386, 801-812 2015.
- Malachias MVB et al. 7a Diretriz brasileira de hipertensão arterial. *Arquivos Brasileiros de Cardiologia*, Rio de Janeiro, v. 107, n. 3, supl. 3, set. 2016.