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DEMYSTIFYING HYPERTENSION

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Abstract: This document encompasses an action that seeks to integrate the medical students of the Pequeno Príncipe College with the community of the city of Curitiba, which makes use of the Unified Health System (SUS) through the primary care that takes place in the Basic Health Units (UBS). As was seen during the visit to the Osternack Health Unit, systemic arterial hypertension (SAH) caught the students' attention due to the high number of cases of the disease, which is chronic, silent, multifactorial and can trigger various complications that can lead to death. To this end, data was collected during field inspections and studied together with the teacher and health workers, leading us to understand the need to promote awareness and care for hypertensive patients, with a view to improving treatment and greater adherence to taking continuous blood pressure control medication, by giving a talk to UBS health professionals and community health agents, to inform them of the new guidelines on hypertension and provide training to be used when monitoring these patients in their homes, along with handing out stickers made by the group. The patches were designed to make it easier for patients to take their medication at the right times and with consistency, thus reducing symptoms and the risk of the disease progressing and improving the quality of life of people with hypertension.

INTRODUCTION

Hypertension is one of the main causes of premature death worldwide. The World Health Organization (WHO) estimates that, in 40 years, the number of hypertensive patients has jumped from 594 million people in 1975 to around 1.13 billion in 2015, with the majority of these people living in low- and middle-income countries, i.e. mainly underdeveloped and peripheral countries.

Studies by the Global Burden of Diseases (GBD) estimate around 10.8 million annual deaths and 235 million years of life lost, adjusted for disability, due to hypertension, which shows how these problems directly affect the population's quality of life.

Hypertension is a multifactorial condition diagnosed when there is a sustained increase in blood pressure levels, >140 and/or 90 mmHg, resulting from genetic/epigenetic, social, environmental, cultural and lifestyle factors.

Among the aspects that contribute to the significant risk of hypertension are unhealthy diets, characterized mainly by high salt intake, a diet rich in saturated fat and trans fats, low consumption of vegetables and fruit, a sedentary lifestyle, alcohol and tobacco consumption and excess weight or obesity. In addition, there are non-modifiable risk factors which include a family history of hypertension, age over 65, as well as co-existing diseases such as diabetes mellitus or kidney disease.

Hypertension can be easily detected by measuring it at home or at a health center, such as a basic family health unit (USF). From this perspective, this disorder can often be treated effectively with low-cost medication.

According to the latest data from the 2019 national health survey in Brazil, the states with the highest number of medical diagnoses of hypertension are: Rio de Janeiro with 28.1%, followed by Minas Gerais with 27.7% and Rio Grande do Sul with 26.6%. In Curitiba, hypertension is the second leading cause of hospitalization, as well as the leading cause of death from cardiovascular diseases, which is one of the factors contributing significantly to these results. Unfortunately, there is still a lack of adherence to continuous treatment to control blood pressure after medical diagnosis.

Primary health care (PHC) professionals are extremely important in these cases, from diagnosis to treatment. This is because they are involved in the monitoring, prevention and control of systemic arterial hypertension, always focused on the fundamental principle of person-centered practice. Consequently, involving caregivers and users at an individual and collective level in this area of health contributes to reducing mortality and improving the quality of life of the patients treated.

OBJECTIVES

a) To train health professionals who work to promote the health of hypertensive patients or those with systemic arterial hypertension.

b) Promote educational activities to demystify some approaches to systemic arterial hypertension.

c) Develop a sticker indicating the medication schedule.

THEORETICAL BACKGROUND

The Universal Health System (SUS) was created with the Federal Constitution of 1988 and regulated by Law 8080/90 in order to provide and guarantee the universal right to health as a duty of the State in a comprehensive and free manner to all residents of Brazil (Brazil, 1990).

Thus, according to the Ministry of Health, in the text "About the SUS", a system based on health promotion, prevention, recovery and rehabilitation was established in Brazil. It is based on six principles (Brasil, 1990):

a) Universality (guaranteed access for all citizens);

b) Equity (access to health services according to their needs);

c) Comprehensiveness (offering health actions and services in an integrated manner);

d) Decentralization (distribution of responsibilities and resources between the different levels of management);

e) Regionalization and hierarchization (establishes an organization);

f) Social participation (community involvement).

In this sense, in addition to medical and hospital care, according to the Ministry of Health, the SUS performs other functions, such as carrying out permanent surveillance of sanitary conditions, sanitation, environments, occupational safety and the hygiene of establishments and services; regulating the registration of medicines, supplies and equipment; controlling the quality of food and its handling; standardizing services and defining standards to ensure greater health protection.

Within the SUS, in primary care, mainly in the basic health unit (UBS), there is constant and initial care for patients, with treatment for different diseases, among which one of the most common is hypertension.

According to the Ministry of Health, hypertension is the most common disorder related to the heart and vascularization, and is also the main factor in stroke, kidney disease and heart failure (HF) (Ministry of Health, 2020).

According to the scientific text "Robbins & Cotran Pathology - Pathological Basis of Diseases" by Kumar (es), normal blood pressure is when the systolic is below 120 and the diastolic above 80. When the systolic varies between 120 and 129 and the diastolic below 80, there is high blood pressure. When the systolic is between 130 and 139 or the diastolic between 80 and 89, there is stage 1 hypertension. In stage 2, the systolic is above 140 or the diastolic above 90. In the most acute cases, in a hypertensive crisis, the individual's systolic and diastolic pressures are above 180 and 120, respectively.

It should be noted that approximately 90% of all cases of hypertension are classified as primary, where the consistently high blood pressure has no known cause (Kumar, 2023). The rest of the cases fall into secondary hypertension, in which the underlying cause can be identified. In this sense, some of the possible triggers of high BP are (Kumar, 2023):

a) Obstruction of renal blood flow;

b) Hypersecretion of aldosterone (stimulates excessive salt reabsorption and water in the kidneys);

c) Pheochromocytoma (a tumor of the adrenal medulla that increases the secretion of epinephrine and norepinephrine).

Furthermore, when left untreated, hypertension can cause serious damage to the brain, heart, blood vessels and kidneys even before it shows symptoms such as pain (Kumar, 2023).

Currently, approximately 1.13 billion people suffer from Systemic Arterial Hypertension (SAH) worldwide, which represents around 25% of the global adult population.

In Brazil, more than 38 million people aged 18 or over have been diagnosed with SAH, according to the National Health Survey (2019). A study by the Ministry of Health in partnership with the IBGE and the Oswaldo Cruz Foundation, carried out with 271,677 individuals investigated in the PNAD, analyzed the trend in the prevalence of SAH using a nationwide population questionnaire by the Brazilian Institute of Geography and Statistics (IBGE) in the years 2008, 2013 and 2019.

In 2013, 60,202 individuals aged 18 or over were selected and, in 2019, 88,531 individuals remained in the survey. The data analyzed showed that in 2008 there were 19.9% of people diagnosed with SAH (approximately 26 million Brazilian adults aged 18 or over). Of the 60,202 individuals in 2013, 3.0% had never had their blood pressure checked and 21.3% were diagnosed with SAH (approximately 31 million Brazilians). And in the last year of the survey (2019) 2.0% never had their blood pressure checked and 23.9% were diagnosed with SAH (approximately 38.1 million Brazilian adults). The distributions by geographical region and area of residence point to a higher prevalence in the Southeast and South regions and in urban areas.

In the state of Paraná, according to the Paraná Health Department, the prevalence of hypertension is estimated at around 32.4%, which equates to around 2.5 million people affected.

According to the 2017 Surveillance Survey of Risk and Protective Factors for Chronic Diseases (VIGITEL) by the Ministry of Health (updated on 01/112022), 23.1% of the population of Curitiba (PR) has a medical diagnosis of hypertension. Among people in the capital, the disease affects 22.1% of women, while 23.9% are men.

With this in mind, there are protocols and/or guidelines for the diagnosis and treatment of Systemic Arterial Hypertension (SAH).

PLANNING

In order to carry out the extension work on raising awareness of Systemic Arterial Hypertension (SAH) at the Osternack Basic Health Unit, a detailed plan was drawn up to ensure that the activities were carried out effectively.

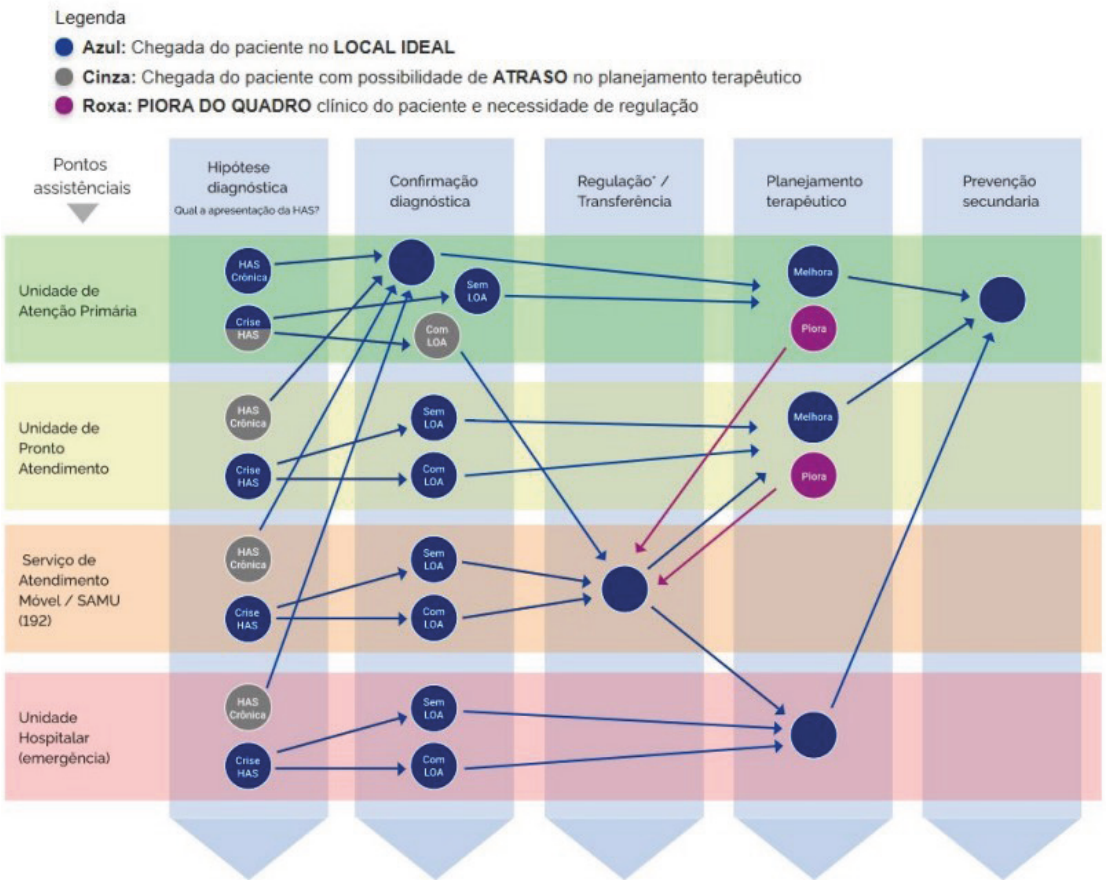
Firstly, an educational banner will be created with myths and truths about SAH, using informative design and clear images to make it easier to understand and, after Acex, it will be displayed in the UBS waiting room so that other patients in the community can also have access to it.

A dynamic oral presentation will also be prepared for the waiting room, lasting 15 to 20 minutes, involving patients in questions and answers. The content will cover myths and truths about hypertension, the importance of blood pressure control and healthy lifestyle tips. Information leaflets and, if available, anatomical models will be used.

In addition, stickers will be developed to facilitate the correct use of medication: one for daytime medication and one for nighttime medication. The stickers will be distributed during the presentation or will be available at the UBS.

The schedule of activities includes:

Figura 1 – Processo Completo da Linha de Cuidado do Adulto com HAS



SOURCE: MINISTRY OF HEALTH (ED.). Line of Care for ADULTS WITH SYSTEMIC ARTERIAL HYPERTENSION. Available at: <https://bvsms.saude.gov.br/bvs/publicacoes/linha_cuidado_adulto_hipertens%C3% A3o_arterial.pdf>.

a) Week 1: Initial meeting with the team for detailed planning.
b) Week 2: Design of the banner and stickers, and preparation of the presentation.
c) Week 3: Revision and printing of the banner and stickers; rehearsal of the presentation.
d) Week 4: Execution of activities at the UBS, with the banner being fixed and making the presentation.

To evaluate the project, feedback will be collected from participants on the presentation and information materials. The team will also carry out a self-assessment to identify strengths and areas for improvement. The results and feedback will be compiled into a final report for future action.

Resources required include graphic materials for printing the banner and stickers, equipment such as a projector and sound system (if necessary), and an estimated budget to cover costs. All material will be reviewed by a health professional to ensure accuracy.

With these steps well defined, it is hoped to effectively raise awareness of systemic arterial hypertension and promote an improvement in the quality of life of patients at UBS Osternack.

DEVELOPMENT

The action took the form of a banner explaining the most common myths and truths about high blood pressure and small EVA sheets with one side green and the other red. These materials were presented to the public in the waiting room of the Osternack Health Unit and, with this, a dynamic was carried out with the same ideas presented on the banner so that those present could answer by raising the card whether the assertion was true (green side) or false (red side). After a brief introduction on what hypertension is, an academic read out each statement at random and the participants held up the sign and commented on what they thought was the correct answer and why. Between each statement and reflection by the members who took part, each academic explained the statement and justified the correct answer.

In addition, two types of small stickers were made, the first with a drawing of a sun and the second with a drawing of a moon. These were specially prepared to be stuck on the medicine boxes of patients who have difficulty knowing the timetable and, consequently, administering them correctly. So, after practicing in the waiting room, the students went to the work room of the community agents at the same health unit and gave them the stickers, explaining the purpose of making them and distributing them according to each patient's needs.

Finally, at the end of the action, which lasted about an hour, we heard the testimonies of both the participants in the waiting room and the community agents. The first group thanked us and reported having cleared up doubts and demystified some conceptions about hypertension. From this perspective, the community agents were satisfied with the stickers, describing how they would facilitate their work in helping patients in the community to adhere more effectively to drug treatment.

Stickers given to the Acs

Banner and signs used in the Acex dynamic

RESULTS

According to the objectives and planning, the initial intention was to train the community agents at UBS Osternack in health promotion for the hypertensive population (through a lecture and handing out the stickers), as well as creating an educational dynamic with the patients in the waiting room.

In this sense, it became clear that all the objectives were splendidly achieved. The public impacted by ACEx were the health agents and UBS users in general - especially those in the waiting room, who were mostly elderly people and women waiting for their medical appointments.

As a result, the delivery of the patches and the conversation with the agents produced satisfactory results. They reported that patients (mainly the elderly and hypertensive patients) often fail to take their medication because they have doubts, forget or misunderstand the timetable. They were therefore very pleased with the material - as well as explaining that it would be a great help. 220 stickers were made available for distribution by the agents, so that more people would be reached by this action. In addition, the talk about hypertension and how to deal with these patients was also effective.

In the context of the myth or truth dynamic, the outcome was also excellent. The participation of the users was admirable, almost everyone was very interested in giving their opinions and receiving lessons. There were around 16 people in the room, but on average 10 people used the boards (some were asked questions, others didn't answer, although they paid attention - around 30 people). The percentage of correct answers to questions 1 to 8 - which were asked at random - was 30%, 100%, 50%, 90%, 100%, 30%, 50% and 100% respectively.

From this point of view, it is clear that the people there already had a certain amount of knowledge about the subject, according to the number of correct answers. However, with the didactic explanations, all possible doubts about hypertension were resolved, and the patients left with greater knowledge, and an exacerbated potential for hypertension control and prevention. In this way, it is worth pointing out that it was a day of extremely pertinent actions, which has made and will continue to make a difference to the health and lives of the Osternack BHU community.

CONCLUSION

According to the data obtained in the field, in the action carried out in the waiting room and in the training with the community health agents (CHAs), the positive impact of our Acex was noticeable. Based on the participation of the patients we were able to approach through our dynamic, we saw that the subject of our work - Systemic Arterial Hypertension (SAH) - is of interest and concern to the population. However, they have mystified knowledge about the subject, and our group worked to resolve their doubts and provide them with more knowledge about a condition that is present in many patients and which can pose a risk and loss of quality of life. The methodology used in the game, "Myth or Truth", together with the banner, was an effective strategy for keeping participants engaged and thus transmitting specific information about SAH, where we also had the opportunity to clarify issues about blood pressure that made our study in preparation for the action worthwhile.

In addition to this, we talked to the health agents about the stickers we had made, with the aim of guiding their distribution, in order to make it easier for hypertensive patients to take their medication and to help them in their work of indicating the times of administration of medication at home. As a result, we obtained the agents' cooperation and commitment to using the patches properly. In the meantime, we detected few difficulties either in the production of the material or in the application of Acex, just as we obtained adherence from the people present in the health space, who joined in the dynamics in an integrative way, showing a strong point of our project. Finally, we concluded that we were able to put the objectives of the extension action into practice and achieve positive results with the community.

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