ISSN-e [2675-5602]

Global Academic Nursing Journal

REVIEW ARTICLE

Factors that influence patients' adherence to systemic arterial hypertension treatment

Factores que influyen en la adherencia de los pacientes al tratamiento de la hipertensión arterial sistémica

Fatores que influenciam os pacientes na adesão ao tratamento da hipertensão arterial sistêmica

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How to cite this article:
Peres JB, Silva LHL, Sabino MB, Lima AF, Sant'Anna JB, Charlo PB. Factors that influence patients' adherence to systemic arterial hypertension treatment. Glob Acad Nurs. 2023;4(Sup.2):e366. https://dx.doi.org/10.5935/2675-5602.20200366

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Submission: 10-17-2022
Approval: 06-06-2023

Abstract

The aim was to investigate factors that influence patients' adherence or non-adherence to SAH treatment. This is an integrative review, in which the following databases were used to search for articles: SciELO, LILACS, and the PubMed platform over 5 years (2018 - 2022). The main factors that contribute to adherence to systemic arterial hypertension treatment are socioeconomic and clinical issues, family support, education, and social issues. Factors for non-adherence include low education, inadequate diet, high quantities of medications, and difficulty accessing medications. Nurses have the fundamental role of promoting continuous education, in addition to providing both physical and psychological assistance. It is concluded that the appropriate factors must be taken into consideration during periodic consultations, in addition to the fact that education is essential for awareness work and thus improves the quality of life of these patients.

Descriptors: Primary Health Care; Diagnosis; Hypertension; Treatment Adherence; Nursing.

Resumén

El objetivo fue investigar los factores que influyen en la adherencia o no adherencia de los pacientes al tratamiento de la HSA. Se trata de una revisión integradora, en la que se utilizaron para la búsqueda de artículos las siguientes bases de datos: SciELO, LILACS y la plataforma PubMed durante un período de 5 años (2018 - 2022). Los principales factores que contribuyen a la adherencia al tratamiento de la hipertensión arterial sistémica son: cuestiones socioeconómicas y clínicas, apoyo familiar, educación y cuestiones sociales. Los factores de incumplimiento incluyen: baja educación, dieta inadecuada, altas cantidades de medicamentos y dificultad para acceder a los medicamentos. Las enfermeras tienen el papel fundamental de promover la educación continua, además de brindar asistencia tanto física como psicológica. Se concluye que se deben tener en cuenta los factores adecuados durante las consultas periódicas, además de que la educación es fundamental para el trabajo de concientización y así mejorar la calidad de vida de estos pacientes.

Descriptores: Atención Primaria de Salud; Diagnóstico; Hipertensión; Adherencia al Tratamiento; Enfermería.

Resumo

Objetivou-se investigar fatores que influenciam os pacientes na adesão ou não ao tratamento da HAS. Trata-se de uma revisão integrativa, aos quais, para a busca dos artigos foram utilizadas as bases de dados: SciELO, LILACS e a plataforma PubMed em um período de 5 anos (2018 - 2022). Os principais fatores que contribui para adesão ao tratamento da hipertensão arterial sistêmica são: questões socioeconômicas e clínicas, o apoio familiar, escolaridade e questões sociais. Já sobre os fatores para a não adesão incluem: baixa escolaridade, dieta inadequada, altas quantidades de medicamentos e dificuldade de acesso aos medicamentos. O enfermeiro tem o papel fundamental de promover a educação contínua, além de prestar a assistência tanto física, quanto psicológica. Conclui-se que os devidos fatores devem ser levados em consideração nas consultas periódicas além de ser fundamental a educação para o trabalho de conscientização e assim melhorar a qualidade de vida desses pacientes.

Descritores: Atenção Primária à Saúde; Diagnóstico; Hipertensão; Adesão ao Tratamento; Enfermagem.

Introduction

Systemic arterial hypertension (SAH) is today a major public health problem. Risk factors, such as high consumption of processed foods, rich in sodium, trans/saturated fat, fast foods, and other types of sweets; as well as age, sex, overweight and/or obesity, sedentary lifestyle, alcohol, illicit drugs, in addition to some medications without a medical prescription, combined with the lack of early detection, treatment, and appropriate self-care, provide irreversible sequelae, therefore requiring vacancies in the urgency and emergency and professional care sectors[1, 2].

Considered a chronic disease, high blood pressure affects more than 36 million people in Brazil and is considered one of the main risk factors for the development of other diseases, such as cardiovascular and kidney diseases. It is observed that the predominant deaths from cardiovascular diseases (CVD) are mostly due to elevated blood pressure (BP)[1].

To diagnose a patient as having hypertension, it is necessary to measure blood pressure on at least two different occasions of the day and in the absence of antihypertensive medication. The patient will be classified as hypertensive when the measured systolic blood pressure (SBP) is ≥140 mmHg and/or their diastolic blood pressure (DBP) is ≥90 mmHg after repeated measurements[1].

AH is a neglected disease, and most of the population often ignores it, however, it is easy to prevent, and its treatment does not have high financial costs for the patient, however, it continues to be one of the most important causes of death, given that it is a disease asymptomatic and with slow evolution. In the absence of adequate treatment, it usually causes structural and/or functional changes in target organs, such as the heart, brain, kidneys, and vessels[3].

To reduce cases of morbidity and mortality, hypertension needs to be carefully monitored and treated, not only by patients but mainly by health professionals. Therefore, it is necessary that, in Basic Health Units (UBS) or in any other service sector, there is a team of trained professionals, who know the characteristics of the pathology, as well as the forms of treatment. The nurse, together with a multidisciplinary team, must develop actions to promote, prevent, and monitor hypertensive patients, motivating them mainly to adhere to non-formal and formal treatment[4].

As for patient adherence to SAH treatment, it depends on beliefs, socioeconomic conditions, cultural aspects, access to health services, etc. An effective and healthy doctor-patient relationship is also important for treatment adherence. Furthermore, in the case of a disease in which there are no symptoms, this may be a motivating factor for refusing to use the medication. The doctor's level of knowledge about the disease and compliance with the guidelines on the subject are also decisive. Pharmacological therapy itself can also have an impact because it can be expensive and difficult to obtain in the public health network[5].

Thus, the question arises which of the factors presented in the scientific literature influence patients' adherence to the treatment of systemic arterial hypertension? To achieve the guiding question, the objective of this research was to investigate factors that influence patients whether they adhere to SAH treatment.

Methodology

The type of study adopted for this scientific work consists of integrative bibliographical research, a broad investigation of the literature in already published material, consisting of original articles[6].

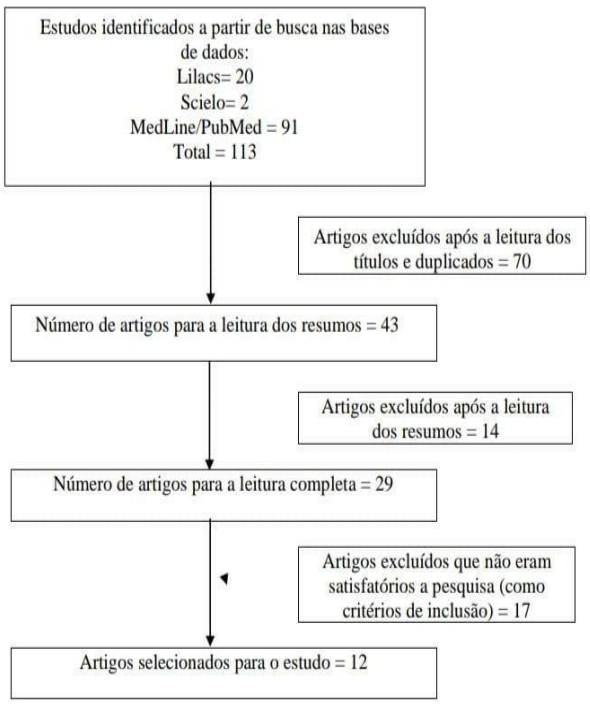

Figure 1. Flowchart of journals selected for research. Maringá, PR, Brazil, 2022

The search followed six stages, being I - Formulation of the guiding question; II - Formulation of the objective of the review; III - The inclusion and exclusion criteria for the study; IV - Previous reading of articles to select them to compose the literature review; V - Analysis of all articles chosen and included for the review; VI - Discussion and synthesis of results[6].

The survey of contributions provided by various authors took place over the chronological period from January 2018 to June 2022, that is, 5 years.

The databases used were Scientific Electronic Library Online - SciELO (2), Latin American and Caribbean Literature in Health Sciences - LILACS (20), and the PubMed platform (91), using the following descriptors: Primary Health Care, Diagnosis, Arterial Hypertension, Adherence to Treatment and Nursing. The descriptors were used using the Boolean operator "AND".

The selection of articles occurred as shown in Figure 1, after searching for scientific works already published (113), the titles were initially read, which left 42.

Then, a careful reading of the abstracts was carried out to identify similarities with the objective of the research, keeping 29 studies. Subsequently, the publications were read and analyzed in full, in the end, 12 articles were selected, as shown in the flowchart.

This research did not require ethical clearance, as it is a literature review.

To analyze the content, content analysis was used, which content analysis is sought in qualitative research: a way of thinking and doing, which is structured in three phases: 1) Pre-analysis; 2) Exploration of the material, categorization, or coding; 3) Treatment of results, inferences, and interpretation of results[7].

Results

Aiming to complete the research objective of investigating in the scientific literature the factors that influence or not influence adherence to SAH treatment, 12 articles were selected. The selected researches are published between the years 2018 and 2022, using as database: Latin American and Caribbean Literature in Health Sciences LILACS (8) and the PubMed platform (4), focusing on adults and elderly people from the most diverse backgrounds. age groups. The research presented is field and cohort research and all of it was produced in Brazil in English and Portuguese.

To facilitate the visualization and compilation of information, Chart 1 presents the numerical identification of the articles, as well as the method used and the main results that contributed to answering the research question: "What factors does the scientific literature present that influence adherence of patients to the treatment of systemic arterial hypertension?".

Chart 1. Identification of selected articles published between 2018 and 2022. Maringá, PR, Brazil, 2022

ID	Methodology	Results
08	Cross-sectional study with hypertensive users who used medication to control blood pressure levels.	A large proportion of hypertensive patients did not show therapeutic adherence and the associated factors can be modified through light technologies and investments in the quality of primary health care.
09	Cross-sectional study with 421 participants. Adherence was assessed using the following components: weight control, waist circumference, physical activity, etc..	Socioeconomic and clinical factors were associated with treatment adherence. Factors such as smoking, along with overweight and obesity, were associated with non-adherence. Nursing has the role of providing support to these patients.
10	Descriptive qualitative study was developed with 16 people attending nursing consultations.	Willpower, family and multi-professional support, knowledge about the topic and forms of prevention facilitated adherence; on the other hand, little knowledge, laziness, alcoholic beverages, tobacco, and forgetfulness made adherence difficult.
11	This is a cross-sectional, descriptive study, with a quantitative approach, developed with 254 elderly men.	Smoking absenteeism was predominant in adherence. Lifestyle was the determining factor for non-adherence. Health professionals must establish dialogue and educational actions.
12	Research with a quantitative approach, developed in the city of Fortaleza - CE, with 602 hypertensive patients, treated at a Secondary Care Health Center.	There was no association between adherence and completeness in nursing care.
13	Cross-sectional study, with 72 hypertensive patients, was carried out with hypertensive patients from the Family Health Strategy of Lacerdópolis - SC.	Regarding treatment adherence, 6.9% are adherent, 19.4% have probable adherence, 70.8% have probable low adherence and 2.8% have low adherence. Those who use multiple doses are less adherent.
14	The study had the participation of 63 individuals from the ESF and 51 from the UBS. Questionnaires were applied to identify the population profile and evaluate adherence.	The variables age, female sex, and sedentary lifestyle were homogeneous in both groups. People under 60 years of age demonstrated lower adherence to treatment.
15	Cross-sectional quantitative research was carried out in two Basic Health Units, in the interior of Paraná, Brazil, with 257 hypertensive patients, the vast majority of whom were women.	Age, occupation and longer time since diagnosis were factors for adherence. Unemployed individuals were less likely to join. Nursing plays a fundamental role in the education of these people.
16	Descriptive, cross-sectional study with a quantitative approach, with elderly people, between November 2017 and March 2018.	Diastolic blood pressure, education, and smoking time are adherence factors. Fragility may be a factor in non-adherence. The nurse must be aware of the syndrome and provide support.
17	This is a descriptive-cross-sectional study, involving 213 individuals, self-reported with a diagnosis of hypertension.	84% did not adhere to treatment. Females showed greater adherence. Barriers to adherence were difficulty changing lifestyle habits, irregular medical appointments, and medication schedules.

18	This is a cross-sectional study, with 641 hypertensive patients aged 40 years and over, living in the urban area of the municipality of Governador Valadares, Minas Gerais.	Individuals with minimum adherence are 8.4 times more likely to develop depressive symptoms when compared to those with maximum adherence. Nursing needs to understand the problem and provide support.
19	Cross-sectional, descriptive study, carried out in primary health care, with 242 hypertensive patients.	Age group and education were related to adherence or not to treatment. Functional Health Literacy was not associated with adherence; however, it is suggested that nurses undertake continuing education.

Most studies indicate that the main causes for treatment adherence include socioeconomic issues, clinical factors, family and multi-professional support, diastolic blood pressure, knowledge of the subject, and longer diagnostic time.

Factors for non-adherence include low education, overweight and obesity, high quantities of medication (the greater the number, the lower the chances of adherence), difficulty in accessing medication in health services, alcoholism, smoking, age (the older the, lower adherence), depression and sex, the latter being divergent.

According to the studies presented, nursing plays a fundamental role, as it is up to them to provide information regarding the pathology, that is, to promote continuous education, to provide support to these people, especially those who suffer from other diseases (such as frailty), constantly monitor their clinical conditions and act in emergencies if necessary.

Discussion

To organize the discussion, the results were categorized into three thematic axes, as follows: Factors that help in adherence to SAH treatment, Factors that lead to non-adherence to SAH treatment, and the role of nursing in adherence to treatment.

Factors that help adherence to SAH treatment

Adherence to SAH treatment includes the act of starting pharmacotherapy, that is, taking medications as frequently as prescribed and persisting in long-term therapy, which is the recognized factor that contributes to greater control of blood pressure in hypertension[20].

Because treatment adherence is defined as the act of a patient taking medication, following a diet, and/or having healthy lifestyle habits prescribed by a healthcare professional, adherence is considered a multifactorial and complex process, that considers environmental, psychosocial, and individual factors[21].

Several categories of factors, including demographic, socioeconomic, co-occurring medical-behavioral conditions, therapy-related, healthcare team, and system-related factors, and patient factors are associated with treatment adherence. Understanding the categories of factors that contribute to SAH treatment adherence is essential in managing adherence[22].

This study highlighted socioeconomic issues, clinical factors (such as diastolic BP), family support, multidisciplinary support, knowledge of the topic, and longer time to diagnosis as the main factors promoting adherence to SAH treatment.

A study similar to the results found in this article, which analyzed 20 studies in an integrative review of the literature, found the following positive factors: age, sex, ethnicity, education level, economic level, quantity of medications prescribed, therapeutic regimen (the less complex, the greater the adherence), adverse effects of medications (the less, the greater the adherence), access to the health system (the greater the access, the greater the adherence), relationship with the health professional, smoking and alcohol[23].

Socioeconomic issues help with adherence to SAH treatment. Hypertension control in adults with private health insurance over time shows up to 22% greater adherence[24]. Economic issues essentially affect access to consultations and medications, and social issues involve professional and family support.

Regarding multidisciplinary support, the quality of the relationship between the patient and their healthcare team, the communication style, and patient-centered treatment decisions affect adherence. Trust in professionals is a critical currency, and this especially applies to healthcare. The patient must have confidence that their caregivers are competent and have their best interests at heart in treatment management decisions and that they will always be available to provide support[25].

Social support can be defined as support from family, friends, neighbors, and institutions, which strengthens the patient's psychological dynamics to deal with emotional problems and provides emotional, economic, and cognitive help. Literature research reveals that family members, especially spouses, provide more help in crises and married patients perceive more emotional support than single patients. Medication adherence in patients with hypertension has a strong correlation with perceived social support. Patients who perceive support from friends and family have better adherence to treatment than those who do not perceive support[26].

A survey, analyzing a specific group of patients in a UBS with hypertension, concluded that educational interventions increased participants' knowledge about hypertension and positively influenced their beliefs about the medication. According to the authors, educational activities create an opportunity for patients to better understand their condition and the role of therapy, a fact that increases their treatment adherence. Therefore, continuous education of health professionals is necessary[27].

Increased knowledge about SAH and its consequences tends to increase treatment adherence. Education-based adherence interventions are often a component of successful multi-method interventions[28].

Some patients do not accept the diagnosis, which is a major impediment to adherence. While not denying the diagnosis, other patients may not realize the potentially serious impact of a currently asymptomatic illness on future

health risks, including symptomatic and life-threatening conditions such as coronary heart disease, chronic heart failure, stroke, or dementia. As time passes and symptoms appear, the diagnosis tends to be taken more seriously, and adherence increases[29].

Clinical factors also influence adherence to SAH treatment. Patients without comorbidities tend to adhere more frequently to treatment, a fact associated with fewer daily medications and fewer side effects, due to drug combinations[30].

The crucial point for increasing adherence to hypertension treatment is ease of access to health services. Access to health services has greatly improved with the implementation of the SUS, which has guaranteed universality and equity of care for the population since 1988, as well as the regulation of supplementary health services in 1998. However, there is still a long way to go[31].

Factors that lead to non-adherence to SAH treatment

Non-adherence to medication treatment is a process characterized by three major components: initiation, implementation, and discontinuation. Initiation is the time from prescription until the first dose of medication is taken. In clinical studies, 4% to 5% of patients never start treatment. In clinical practice, non-initiation appears to be much more frequent, with values >20%, however, this phenomenon can vary considerably depending on countries and access to medicines[28].

Dosage regimen implementation is the extent to which a patient's actual dosage matches the prescribed dosage regimen and addresses daily variations in medication intake. Inadequate implementation is the typical consequence of occasional forgetfulness or negligence, resulting in prolonged periods of treatment interruptions, whether intentional or unintentional. Discontinuation marks the end of therapy and treatment is stopped, 50% of patients discontinue treatment within a year[32].

The impact of non-adherence or suboptimal adherence is a major contributor to uncontrolled hypertension, which is the leading risk factor for the development of fatal cardiovascular outcomes[28].

Low education, in non-adherence to the proposed treatment protocol, is associated with a low level of understanding of the severity of SAH and its consequences, as well as difficulty in managing and understanding the medication and lifestyle protocol[33].

Complex multidrug regimens, especially when combined with multiple daily doses, have long been recognized as barriers to adherence. Alternatively, fewer medications and especially fewer pills, which can be implemented using a single pill per day, combinations are consistently associated with better adherence and hypertension control[33]. Patients who achieve therapeutic targets more quickly, who require fewer adjustments to their medication regimen, and who experience no, or limited adverse effects are more likely to adhere than patients with a longer period of control, who often pass by multiple changes in their medication regimens and experience adverse effects, being less likely to adhere to treatment[35].

Access to and cost of care and medications are important to clinical outcomes and adherence. Adults with lower purchasing power, but with access to free medication, tend to have adherence like that of adults with greater purchasing power, unlike those without free medication and low purchasing power, who find it difficult to adhere to SAH treatment[36].

Another factor, well established in the scientific literature, that prevents satisfactory adherence is the current health care model, which focuses more on treating the disease than on prevention, education, and health. Furthermore, a healthcare model focused on treating the disease to the detriment of prevention is very expensive. In Brazil, the health system is responsible for an average of one million hospitalizations for diseases of the circulatory system each year, at a cost of approximately one billion and 800 million reais[37].

Depression is an extremely costly illness and, although prevalent, it is most often undiagnosed in patients with hypertension. Some relationship has been observed between depression and non-adherence to medication treatment and a high number of prescribed medications has been listed as one of the contributing factors to the development of depressive symptoms in hypertension. Emotional determinants of adherence have largely focused on depression and anxiety. In clinical settings, stress has been repeatedly used as a euphemism for negative emotions, particularly to address undesirable psychiatric diagnostic labeling[38].

A study that analyzed hypertensive elderly people concluded that there is a relationship between depression and hypertension in this group and that this association makes treatment adherence difficult. Furthermore, depression increases the incidence of high blood pressure, suggesting that psychological factors also contribute to non-adherence to treatment[38].

Adults with hypertension, especially as they age, often have multiple chronic conditions and polypharmacy, which can negatively affect medication adherence. Memory changes in elderly patients can result in poor adherence, as well as excessive adherence, with drug consumption greater than prescribed, which can induce drug toxicity. Major depression and other psychoses can negatively influence adherence, as can drug or alcohol abuse and dementia[39].

The control of hypertension in patients with comorbidities, such as drug or alcohol abuse, factors that negatively impact adherence and control, demonstrates that these patients must have a rigorous monitoring protocol, with relatively frequent clinical visits, to increase motivation to achieve the objectives of the treatment protocol, as the greater the number of medical and nursing clinical consultations with non-hypertensive BP, the lower the incidence of clinical outcomes[25].

The cross-sectional study, which aimed to research adherence to Systemic Arterial Hypertension treatment in a Basic Health Unit (UBS), differs from the results of this study. Their results showed that the patients studied had good adherence, however, of those who stopped taking the medication, the majority were female, who reported that

the main reason was that they thought their blood pressure was normal, dispensing the medication on their own[40].

Role of nursing in treatment adherence

Nurses are advanced practice professionals who combine clinical experience in diagnosing and treating health conditions, including hypertension, with an emphasis on disease prevention and providing health education, health training, and counseling to their patients[41].

Its actions, about hypertension, include, among others, routinely screening and diagnosing hypertension through accurate BP measurement, providing patient education on the importance of hypertension prevention, control, and evidence-based ways to adopt and maintain a heart-healthy lifestyle, and prescribing antihypertensive medications using established guidelines[28].

Nurses use motivational interviewing to help patients change healthy lifestyle behavior, seeking to ensure adequate treatment, timely follow-up, intensification of treatment, and, if necessary, referrals to specialists until BP goals are achieved. It is necessary to regularly evaluate the side effects of medication for hypertension, adherence to antihypertensive therapy, lifestyle changes, involving regular physical activity, and a balanced diet with low sodium content, in addition to removing tobacco and reducing consumption. of alcoholic beverages[41,42].

Nursing plays a fundamental role in adherence to SAH treatment, as it is up to them to provide information regarding the disease, that is, to promote continuous education, to provide support to these people, especially those suffering from other diseases, and to constantly monitor their clinical conditions. and act in emergencies, if necessary[43].

Comprehensive nursing care for patients with hypertension is important and presents promising results. The importance of nurses' continuous work with people with hypertension through health education, disease prevention, and constant monitoring is highlighted[44].

The nurse performs the following functions that influence treatment adherence: calling those who are absent and those who have given up; carrying out home visits and group meetings; agreeing with the rights and obligations of the patient and staff and establishing a connection with the patient, considering their beliefs, habits, and culture. Furthermore, as an integral part of the health team, the nurse assumes joint responsibility for care actions to promote health and prevent risks and injuries associated with this disease, for example, during the control and monitoring of patients with SAH[45,46].

Nursing is present and active in assisting people with hypertension, users of Basic Health Units, and other health centers, it is also evolving and has included the use of care technologies to strengthen and prevent hypertension, such as the way of managing care for people with hypertension, to help them adhere to treatment[47].

It is emphasized that it is necessary for a multidisciplinary team, especially nursing, to carry out health education and outline behavior change strategies to encourage participation that contributes to adequate therapeutic adherence and especially social interaction[23].

Conclusion

When investigating in the scientific literature the factors that influence patients' adherence or non-adherence to SAH treatment, it was possible to note that numerous factors influence whether patients adhere to SAH treatment, with adherence to SAH treatment being essential for the reduction of blood pressure indices.

Socioeconomic issues and clinical factors, family and multi-professional support, diastolic blood pressure, knowledge of the subject, and longer time to diagnosis proved to be predictive factors for better adherence to treatment, unlike low education, overweight and obesity, high amounts of medication, difficulty accessing medicines in health services, alcoholism, smoking, old age, and depression, which are factors associated with a higher rate of non-adherence.

Treatment adherence is not only linked to the act of taking or not taking prescribed medication, but it is also linked to habits that enable these patients to lead healthy lives.

The nurse plays a prominent role, as the main communicator in the health area, and plays a key role in helping patients achieve greater adherence. The support and information provided by nurses have a significant influence on the patient's decision to continue treatment.

Regarding the main functions of nurses, the following can be mentioned: carrying out home visits and group meetings, assuming joint responsibility for care actions to promote health and prevent risks and injuries associated with this disease, for example, during control and monitoring patients with SAH; promoting ongoing education of these patients and providing support, both physical and psychological.

Considering the above, it is essential to invest in health to improve care for this group and to promote well-being and quality of life.

References

1. Barroso WKS, Rodrigues CIS, Bortolotto LA, Mota-Gomes MA, Brandão AA, Feitosa AD de M, et al. Diretrizes Brasileiras de Hipertensão Arterial – 2020. Arq Bras Cardiol [Internet]. 2021 [Acesso em 2022 set 8]; 116(1): 516-658. Disponível em: https://abccardiol.org/article/diretrizes-brasileiras-de-hipertensao-arterial-2020/.
2. Dias GS, Costa MCB, Ferreira TN, Fernandes VS, Silva LL, Júnior LMS, et al. Fatores de risco associados à Hipertensão Arterial entre adultos no Brasil: uma revisão integrativa. BJDV [Internet]. 2021 [acesso em 2022 ago 25]; 7(1): 962-77. Disponível em: https://www.brazilianjournals.com/ojs/index.php/BRJD/article/view/22600.

3. Malachia MVB. Os Desafios do Controle da Hipertensão Arterial em Idosos. Arq. Bras. Cardiol [internet]. 2019 [acesso em 2022 set 2]; 112(3): 279-280 Disponível em: https://www.scielo.br/j/abc/a/SBpB4NRWnsbz9BPJCHgBK8C/?lang=pt.
4. Marciano MVF, Assis LM, Beserra FF, Bacelar LFF. O papel da equipe de enfermagem frente a crise hipertensiva. BJSCR [Internet]. 2021 [acesso em 2022 jul 12]; 33(3): 87-93. Disponível em: https://www.mastereditora.com.br/periodico/20210207_100422.pdf.
5. Pereira IS, Santos MA, Sousa MT, Fonseca HAT, Pereira, ML, Virgens CMB, et al. Avaliação da não adesão ao tratamento farmacológico da hipertensão arterial sistêmica em uma população de Salvador-BA. Braz J Dev [Internet]. 2021 [acesso em 2022 set 2]; *7*(1): 153-174. Disponível em: https://brazilianjournals.com/ojs/index.php/BRJD/article/view/22513.
6. Sousa AS, Oliveira, GS, Alves, LI. A pesquisa bibliográfica: princípios e fundamentos. Cad. da FUCAMP [Internet]. 2021 [acesso em 2022 ago 30]; 20(43): 65-83. Disponível em: https://revistas.fucamp.edu.br/index.php/cadernos/article/view/2336.
7. Bardin L. Análise de conteúdo. São Paulo: Edições 70; 2011.
8. Tosta L, Cavalcante LR, Vieira JPAG, Rode YP, Guimarães AA, Brito LL, et al. Baixa adesão terapêutica em hipertensão arterial sistêmica: prevalência e fatores associados na atenção básica à saúde. Rev Pesq Fisio [Internet]. 2019 [acesso em 2022 jul 28]; 9(1): 45-5. Disponível em: https://www5.bahiana.edu.br/index.php/fisioterapia/article/view/2222.
9. Nascimento MO, Belo RMO, Araújo TLLS, Silva KGNM, Barros MDFFN, Figueirêdo TR, et al. Factors associated to the adherence to the non-pharmachological treatment of hypertension in primary health care. Rev Bras Enferm [Internet]. 2021 [acesso em 2022 ago 29]; 74(suppl 6): 1-8. Disponível em:https://www.scielo.br/j/reben/a/vKw4ScwGhjbnHn4rRX37kdQ/abstract/?lang=em.
10. Miranda, PRDO, Sacramento DDO, Diaz, FBBDS., Toledo, LV, Pereira, RSF, & Alves, KR. Percepção de pessoas com hipertensão arterial sobre aspectos que influenciam a adesão ao tratamento. Rev. enferm. UFSM [Internet]. 2021 [acesso em 2022 ago 28]; 11 (6): e6-e6. Disponível em: https://periodicos.ufsm.br/reufsm/article/view/42403/html.
11. Falcão AS, Silva MGC, Junior AFR, Moura SR, Silva FRS, Sousa ASJ, et al. Estilo de vida e adesão ao tratamento de hipertensão arterial sistêmica em homens idosos. RBPS [Internet]. 2018 [acesso em 2022 ago 28]; 31(2): 1-10. Disponível em https://www.redalyc.org/journal/408/40855558022/40855558022.pdf.
12. Sousa, ASDJ, Moreira, TMM, Machado, ALG, Silva, AZD. Associação entre adesão ao tratamento anti-hipertensivo e integralidade no atendimento de enfermeiros. Rev. enferm. UERJ. 2018; 26(1): 1-5.
13. Dalacosta FM, Restelatto, TR, Turra, L. Adesão ao tratamento e hábitos de vida de hipertensos. R. pesq. cuid. fundam. online [Internet]. 2019 [acesso em 2022 jul 28]; 11(1): 113-117. Disponível em: http://seer.unirio.br/cuidadofundamental/article/view/6490.
14. Almeida ALDJ, Silva NSD, Cardoso VDF; Vanderlei FM; Pizzol RJ, Chagas EF. Adesão ao tratamento medicamentoso da hipertensão arterial em dois modelos de atenção à saúde. Rev. APS [Internet]. 2019 [acesso em 2022 ago 27]; 22(2): 235-250. Disponível em: https://periodicos.ufjf.br/index.php/aps/article/view/16372.
15. Barbosa, MEM, Bertelli EVM, Aggio CM, Scolari GAS, Marcon, SS, Carreira L. Fatores associados à adesão de adultos/idosos ao tratamento da hipertensão arterial na atenção básica Rev Enf UERJ [Internet]. 2019 [acesso em 2022 ago 27]; 27(1): 1-8. Disponível em: https://www.e-publicacoes.uerj.br/index.php/enfermagemuerj/article/view/45894/33102.
16. Silva LM, Souza AC, Fhon JRS, Rodrigues RAP. Treatment adherence and frailty syndrome in hypertensive older adults. Rev Esc Enferm USP. 2020; 54(1): 1-8.
17. Mata, JGF; de Filho, MBG, Cesarino, CB. Adesão ao tratamento medicamentoso de adultos autorreferidos com diagnóstico de hipertensão. Saúde e Pesquisa, 2020; 13(1): 31-39.
18. Soares MM, Guedes GR, Rodrigues SM, Dias CA. Interações entre adesão ao tratamento medicamentoso, meta pressórica e depressão em hipertensos assistidos pela Estratégia Saúde da Família. Cad Saude Publica [Internet]. 2021 [acesso em 2022 ago 27]; 37(8): 1-12. Disponível em: https://www.scielo.br/j/csp/a/YbfGT5NxZ3fXwfqtmMSRH4R/abstract/?lang=pt
19. Girão AC, Moreira TMM, Silva JR, Gomes EB, Silva GF, Pereira MLD, et al. Análise da associação entre adesão terapêutica e letramento em saúde em hipertensos. RECON [Internet]. 2021 [acesso em 2022 set 2]; 11(1): 1-8. Disponível em: http://seer.ufsj.edu.br/recom/article/view/4166.
20. Burnier M, Egan BM. Adherence in Hypertension: A Review of Prevalence, Risk Factors, Impact, and Management. Circulation Research [internet]. 2019. [acesso em 22 set 2022]; 124(1):1124–40. Disponível em: https://www.ahajournals.org/doi/full/10.1161/CIRCRESAHA.118.313220.
21. Albuquerque NLS, Oliveira ASS, Silva, JM, Araújo, TL. Association between follow - up in health services and antihypertensive medication adherence [Internet]. Rev Bras Enferm. 2018 [acesso em 2022 ago 28]; 71(6): 3182-3188. Disponível em: https://www.scielo.br/j/reben/a/BfD99RFHCkkGZhbs5kTxVwf/abstract/?lang=en.
22. Mohsen MM, Raid NA, Badway AE, Gafar SE, El-Hammed MA, et al. Tele-nursing versus routine outpatient teaching for improving arterial blood pressure and body mass index for hypertensive patients. American Journal of Nursing Research [internet]. 2020. [acesso em 22 set 2022]; 8(1):18-26. Disponível em: http://pubs.sciepub.com/ajnr/8/1/3/index.html.
23. Amaral JAD. Fatores psicossociais ao controle eficaz do regime terapêutico (adesão ao tratamento) em pessoas idosas hipertensas. [dissertação] [Internet]. Campina Grande: Universidade Estadual da Paraíba; 2022. [acesso em 2022 ago 28]. Disponível em: http://tede.bc.uepb.edu.br/jspui/handle/tede/4332.
24. Cedillo-Couvert EA, Ricardo AC, Chen J, Cohan J, Fisher MJ, et al. Self-reported Medication Adherence and CKD Progression. Kidney Int Rep [internet]. 2018. [acesso em 22 set 2022]; 3(3):645–51. Disponível em: https://www.sciencedirect.com/science/article/pii/S2468024918300147.
25. Mokdad AH, Ballestros K, Echko M, Glen S, Olsen HE, et al. The state of US health, 1990–2016: burden of diseases, injuries, and risk factors among US states.JAMA [internet]. 2018. [acesso em 22 set 2022]; 319(14):1444–72. Disponível em:https://jamanetwork.com/journals/jama/fullarticle/2678018.
26. Turan GB, Askoy M, Cifci B. Effect of social support on the treatment adherence of hypertension patients. Journal of Vascular Nursing [internet]. 2019. [acesso em 22 set 2022]; 37(1):46-51. Disponível em: https://www.sciencedirect.com/science/article/abs/pii/S1062030318301304.

27. Santos HAG dos. Estratégias de Educação em Saúde voltadas para a adesão ao tratamento da hipertensão arterial dos pacientes da UBS Laranjeiras, Marabá, Pará [Internet]. ares.unasus.gov.br. 2020 [cited 2022 Aug 29]. Available from: https://ares.unasus.gov.br/acervo/handle/ARES/23903.
28. Fuller RH, Perel P, Navarro-Ruan T, Nieuwlaat R, Haynes RB, Huffman MD. Improving medication adherence in patients with cardiovascular disease: a systematic review. Heart [internet]. 2018. [acesso em 22 set 2022]; 104(15):1238-43. Disponível em: https://pubmed.ncbi.nlm.nih.gov/29572248/.
29. Williams B, Mancia G, Spiering W, Rosei EA, Azizi M, et al. 2018 ESC/ESH Guidelines for the management of arterial hypertension: the Task Force for the management of arterial hypertension of the European Society of Cardiology and the European Society of Hypertension: the Task Force for the management of arterial hypertension of the European Society of Cardiology and the European Society of Hypertension. J Hypertens [internet]. 2018. [acesso em 22 set 2022]; 36(10):1953-2041. Disponível em: https://pubmed.ncbi.nlm.nih.gov/30234752/.
30. Basu S, Engtipi K, Kumar R. Determinants of adherence to antihypertensive treatment among patients attending a primary care clinic with limited medical armamentarium in Delhi, India: A qualitative study. SAGE journals [internet]. 2020. [acesso em 22 set 2022]; 18(2):1-11. Disponível em: https://journals.sagepub.com/doi/abs/10.1177/1742395320959418.
31. German, PB. Avalição da Adesão ao Tratamento Medicamentoso da hipertensão arterial [monografia] [internet]. Florianópolis: Universidade Federal de Santa Catarina; 2017 [acesso em 2022 setembro 5]. Disponível em: https://ares.unasus.gov.br/acervo/handle/ARES/13135.
32. Kjeldsen SE, Esler MD. Take a blood pressure pill or undergo renal denervation? Lancet [internet]. 2018. [acesso em 22 set 2022]; 391(10137):2298-300. Disponível em: https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)31126-7/fulltext.
33. Gong K, Yan YL, Li Y, Du J, Wang J, et al. Mobile health applications for the management of primary hypertension. Medicine Baltmore [internet]. 2020. [acesso em 22 set 2022]; 99(16):1-5. Disponível em: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7440290/.
34. Ueno T, Nakagomi A, Tsuji T, Kondo K. Association between social participation and hypertension control among older people with self-reported hypertension in Japanese communities. Hypertension Research [internet]. 2022. [acesso em 22 set 2022]; 45(3):1263-8. Disponível em: https://www.nature.com/articles/s41440-022-00953-w.
35. Akinlua JT, Meakin R, Bashir I, Freemantle N. Beliefs about hypertension among primary health care workers and clients in Nigeria: a qualitative study. PLoS One [internet]. 2018. [acesso em 22 set 2022]; 13(12):1–13. Disponível em: https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0209334.
36. Gupta S, Dhamija JP, Mohan I, Gupta R. Qualitative study of barriers to adherence to antihypertensive medication among rural women in India. Int J Hypertens [internet]. 2019. [acesso em 22 set 2022]; 2019(5749648):1-7. Disponível em: https://pubmed.ncbi.nlm.nih.gov/30809390/.
37. Barreto MS, Mendonça RD, Pimenta AM, Garcia - Vivar C, Marcon, SS. Não utilização de consultas de rotina na Atenção Básica por pessoas com hipertensão arterial. Cien Saude Colet. 2018; 23(3): 795 - 804.
38. Andrade DBBC, Rodrigues CS, Novaes AG, Reis CMS, Novaes MRC. Depressão e sua relação com a adesão à farmacoterapia anti-hipertensiva em idosos. REVISA [Internet]. 2020 [acesso em 2022 Ago 25]; 8(3): p. 305-315 Disponível em: http://repositorio.fepecs.edu.br:8080/jspui/handle/prefix/87.
39. Lahariya C, Sundararaman T, Ved RR, Adithyan GS, Graeve HD, et al. What makes primary healthcare facilities functional, and increases the utilization? Learnings from 12 case studies. J Family Med Prim Care [internet]. 2020. [acesso em 22 set 2022]; 9(2):539–46. Disponível em: https://pubmed.ncbi.nlm.nih.gov/32318378/.
40. Monteiro AAF, Silva GCA, Silva, LV, Cunha, LS, Torres, PA. Estudo sobre a adesão ao tratamento de hipertensão arterial sistêmica na UBSF de Três Poços. BJHR. 2020; 3(1): 1289-1305.
41. Hannan JA, Mensah YC, Tokieda N, Smith PS, Gawlic KS, et al. Improving hypertension control and cardiovascular health: An urgent call to action for nursing. Worldviews on Evidence-Based Nursing [internet]. 2022. [acesso em 22 set 2022]; 19(1):6-15. Disponível em: https://sigmapubs.onlinelibrary.wiley.com/doi/full/10.1111/wvn.12560.
42. Oliveira ASFSR, Brito LC, Leite SPR, Azevedo SL, Cunha AL, Nascimento RE, Bessa TR, Souza CJ, Silva JRM. Desafios encontrados pelos enfermeiros na consulta de enfermagem ao paciente hipertenso na atenção primária. Glob Acad Nurs. 2022;3(Sup.1):e239. https://dx.doi.org/10.5935/2675-5602.20200239.
43. Casey, D.E., Daniel, D.M., Bhatt, J., Carey, R.M., Commodore-Mensah, Y., et al. Controlling high blood pressure: an evidence-based blueprint for change. American Journal of Medical Quality [internet]. 2022. [acesso em 22 set 2022]; 37(1):22-31. Disponível em: https://doi.org/10.1097/01.Jmq.0000749856.90491.43.
44. Mattei SÂT, Fátima MM, Castanho MR, Perez AJ, Molina SR. Nursing case management for people with hypertension in primary health care: A randomized controlled trial. Res Nurs Health [Internet]. 2019 [acesso em 2022 set 2]; 43(1): 68–78. Disponível em: https://onlinelibrary.wiley.com/doi/abs/10.1002/nur.21994.
45. Pierin, AMG, Guimarães, MCL. O papel do enfermeiro na adesão dos hipertensos ao tratamento. Nurs [Internet]. 2019 [acesso em 2022 ago 25]; 22(250): 2820. Disponível em: https://revistas.mpmcomunicacao.com.br/index.php/revistanursing/article/view/266.
46. Oliveira, MR, Lago VM. A atuação do enfermeiro e da equipe multidisciplinar no controle da hipertensão arterial sistêmica através da educação em saúde: uma revisão integrativa. REAS [Internet]. 2021 [acesso em 2022 ago 25]; 13(4): 7042. Disponível em: https://18.231.186.255/index.php/saude/article/view/7042.
47. Dias EG, Souza ELS, Mishima SM. Contribuições da Enfermagem na adesão ao tratamento da hipertensão arterial: uma revisão integrativa da literatura brasileira. Rev Epidemiol Control Infect [Internet]. 2016 [acesso em 2022 set 5]; 6(3):138-144. Disponível em: https://online.unisc.br/seer/index.php/epidemiologia/article/view/7470.