

## FACTORS RELATED TO HEALTH LITERACY OF INDIVIDUALS WITH SYSTEMIC ARTERIAL HYPERTENSION: AN INTEGRATIVE REVIEW

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**Abstract:** Health Literacy (HL) is understood as the ability to seek and understand health information, such as those transmitted by professionals for the control and prevention of diseases, and from that to be able to maintain it optimally. The SL is essential for the care of chronic diseases such as hypertension, since the disease requires special care and changes in lifestyle, such as eating habits and physical activity. As an example, we have systemic arterial hypertension, which is a chronic disease, very prevalent in the elderly, a population that coincidentally has an inadequate level of HL in the current scenario, a fact that is worrisome, given the disease's ability to evolve. The present study consists of an integrative literature review, where the search for articles was performed on the Virtual Health Library (VHL) platform, in the databases of the US National Library of Medicine National Institutes of Health (PubMed), Medical Literature Analysis and Retrieval System Online (MEDLINE) and Cochrane, using the descriptors "health literacy", "systemic arterial hypertension (hypertension)" and "elderly (aged)", using the Boolean operator AND. The search generated 455 results, of which 14 met the inclusion criteria. Of these, four showed the individual's sociodemographic data as an influential factor in the HL, three indicated educational intervention as a factor and seven indicated pharmacological adherence as determining factors in the outcome of health literacy of patients with systemic arterial hypertension.

**Keywords:** Health education. Treatment Adherence. Chronic disease.

## INTRODUCTION

Health Literacy (HL) is understood as the ability to access and process health information, and take it as a basis for making assertive decisions about one's own health, becoming the protagonist of care. It is expected

that the individual with satisfactory HL is able to understand, mainly, the guidelines of professionals and health institutions such as medication adherence, changes in eating habits and physical activity, as well as changes in lifestyle in general, in relation to a disease, existing or to prevent others (PASSAMAI, 2012).

In addition to requiring writing skills, mathematical understanding and the ability to communicate and question, the HL also requires the identification of risk situations, dissemination of health information to society and claiming changes when the health system does not meet needs of the community. This way, the SL models the behavior of both the individual and the collective as a family and society (SORENSEN, 2012; WHCA, 2010).

Deficit at the level of LS is a global disorder. This fact is worrisome since it is necessary for proper decision-making and, therefore, its absence can reflect negatively on the control of the various diseases that affect the population around the world. The lack of SL can affect everyone, regardless of age, sex and region where they live. However, some of these conditions can worsen this deficiency and make it more dramatic in some specific populations, such as the elderly, for example, who may have, in addition to the senile characteristics inherent to this stage of life, also have common comorbidities or associated diseases considered very prevalent in this population, such as hypertension, mainly.

Systemic arterial hypertension in Brazil is considered to be the condition in which the results of blood pressure levels are equal to or greater than 140x90 mmHg. This disease makes up the framework of chronic non-communicable diseases, it is also considered a risk factor for the development of other cardiovascular diseases (MALACHIAS et al., 2016). In addition, these aspects have a direct impact on the individual with SAH, reducing

their quality and life expectancy (LUZ et al., 2019). In 2019, there were 38.1 million people with hypertension, being more prevalent in the population over 65 years old (IBGE, 2019).

Saqlain et al. (2019) indicated in a study that the elderly who had an inadequate level of SL consequently were less adherent to the medication compared to those who had an adequate SL. This data was even more attenuated in individuals who also had more than one comorbidity and who used polypharmacy, which indicates that SL influences medication adherence, which is often the main treatment.

Faced with this problem, the present study aimed to carry out an integrative literature review on the main factors that influence the level of health literacy according to what already exists in the literature. This way, it will be possible to have a parameter for a starting point, in order to develop more scientific productions, which will serve as a basis, making it possible to stimulate and develop such a skill in the health environment.

## **MATERIAL AND METHODS**

The integrative literature review is characterized by the gathering of studies developed through different methodologies, allowing reviewers to synthesize results without changing the knowledge included. This review allows criticizing and synthesizing the literature in an integrated way and allows generating new questions about the reviewed topic (SOARES et al., 2014).

For that, six steps indicated for the constitution of the integrative literature review were adopted: formulation of the problem; data collect; establishment of inclusion and exclusion criteria for studies; data evaluation; analysis and interpretation of data; dissemination of data (SOARES et al., 2014).

Following the objective of the first stage of the integrative literature review, the following question was elaborated: what are the main factors studied that influence the level of health literacy of individuals with systemic arterial hypertension?

In the second phase, searches were carried out for articles on the Virtual Health Library (VHL) platform, in the databases of the US National Library of Medicine National Institutes of Health library. (PubMed), Medical Literature Analysis and Retrieval System Online (MEDLINE) and Cochrane, using the descriptors “health literacy (*health literacy*)”, “Systemic arterial hypertension (*hypertension*)” e “idoso (*aged*)”, using the operator booleano AND, combining all descriptors at the same time, until articles in quantity and specificity were retrieved.

In order to carry out the research, the following inclusion criteria were established: full articles; published in the period between 2017 and 2021; available in Portuguese and English; indexed in the aforementioned databases, and that responded to the proposed objective. Exclusion criteria were: repeated articles in the databases; incomplete articles; articles in a foreign language other than English and articles that did not correspond to the proposed theme.

Initially, the articles were selected based on reading the title, followed by reading the abstract and finally, in full, in order to identify their correspondence with the research question.

## **RESULTS AND DISCUSSION**

In the survey carried out in the databases, 455 articles were initially found. 321 from the VHL platform, 67 from PubMed, 29 from Cochrane and 38 from Medline. Of these, 441 were excluded for the following reasons: because they were not related to the topic (n=136), because they did not belong to the

stipulated time interval (n=269), because they spoke a foreign language other than English (n=9), by repetition in the databases (n=20), abstract not consistent with the theme (n=4), results did not answer the proposed question (n=3).

Thus, 14 articles made up the final sample for the integrative literature review, as they corresponded to the proposed objective. As it was shown in figure 1.

To evaluate the content obtained in the articles, the technique of content analysis was applied in full, in order to identify their collaboration for a better understanding of the proposed theme. The main contributions of the selected articles are presented in tables 1, 2 and 3, arranged according to title, author, journal, year and conclusion.

As a result of the question initially

proposed, it was possible to perceive that the articles obtained were divided into 3 main axes that influence the level of health literacy, namely: sociodemographic data (n=4), educational intervention (n=3) and adherence to pharmacological care (n=7).

A study carried out in China showed that sociodemographic characteristics influence the level of HL, the effectiveness of self-care with hypertension and, consequently, significantly impact health-related quality of life, especially in elderly individuals (WANG et al., 2017). Predictably, the set of studies framed in the sociodemographic data axis of this study shows us that age, low level of education, low income, and especially in females, is a strong influencer, as shown in Table 1.

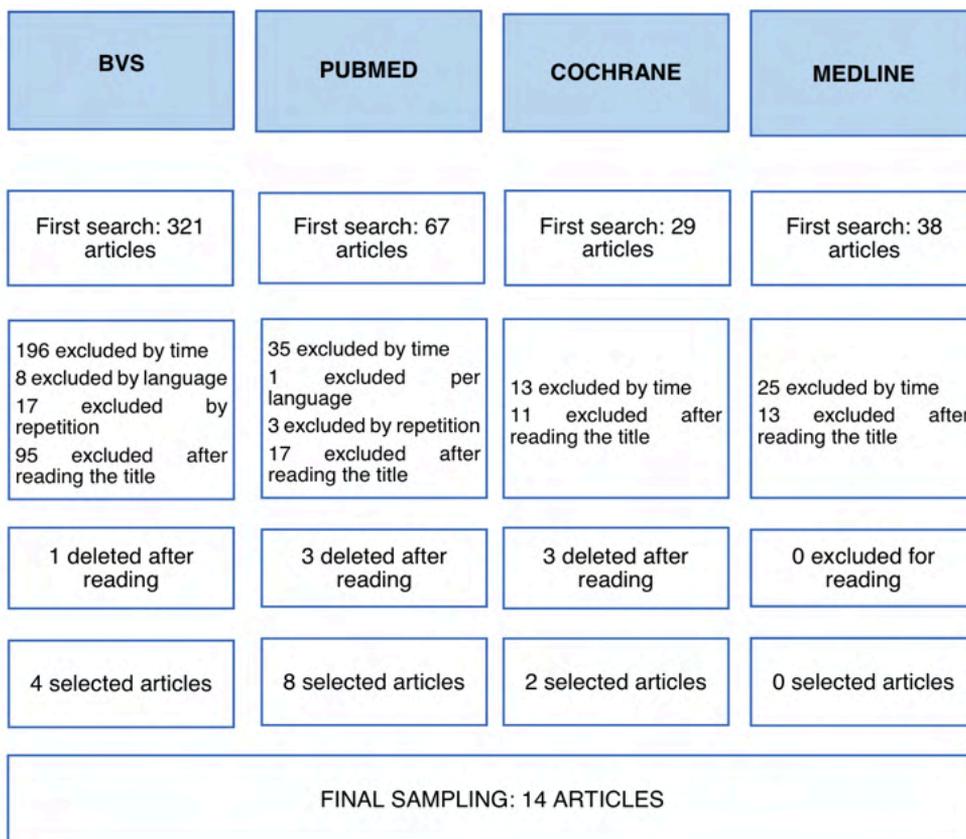


Figure 1: Application of inclusion and exclusion criteria

Source: From the author, 2021.

	Title	Author	Magazine	Year	Conclusion
SOCIODEMOGRAPHIC DATA	The effect of health literacy and self-management efficacy on the health-related quality of life of hypertensive patients in a western rural area of China: a cross-sectional study	Wang et al.	International journal for equity in health	2017	Emphasizes variables such as education and sociodemographic characteristics as influential in the level of LS.
	Health literacy of adults with and without arterial hypertension.	Borges et al.	Rev Bras Enferm	2019	Age and years of schooling were factors associated with inadequate literacy in individuals with hypertension.
	Functional health literacy of elderly people with arterial hypertension in the Family Health Strategy	Lima et al	Rev. bras. enferm	2020	Most of the sample presented inadequate LS, associated with few years of schooling, low income and female gender.
	Low health literacy in elderly patients with non-controlled at a secondary level of health care	Pinhati et al.	HU rev	2019	75% of patients had uncontrolled blood pressure at the time of evaluation, associated with a low level of SL, low level of education and income.

Table 1: Articles dealing with the influence of sociodemographic data on LS of individuals with hypertension.

	Title	Author	Magazine	Year	Conclusion
INTERVENÇÃO EDUCATIVA	Communication skills training for physicians improves health literacy and medical outcomes among patients with hypertension: a randomized controlled trial.	Sany et al	BMC health services research	2020	Treatment with previously trained physicians to arouse the SL was essential for hypertension control.
	Knowledge about Disease, Medication Therapy, and Related Medication Adherence Levels among Patients with Hypertension	Gavrilova et al.	Medicine (Kaunas)	2019	Patients showed a lack of knowledge about their disease, they showed no concern about the drugs, whether they were really necessary, safe or effective, or whether the disease is dangerous enough to lead to death.
	ECHO: A Pilot Health Literacy Intervention to Improve Hypertension Self-Care.	Warren-Findlow et al.	Health Lit Res Pract;	2019	Participants showed improvement in all self-care measures with significant mean differences after the educational intervention.

Table 2: Articles that deal with the use of educational interventions for LS.

Fonte: Do autor, 2021.

Corroborating this, studies carried out recently (2019-2020) prove that, for the most part, the sample composition is female, married or with a partner, with schooling that reached, in the best of scenarios, high school.

In all contexts, the majority of the population in these studies showed to have inadequate SL, which was isolatedly higher in individuals with lower income and lower schooling. Thus, as a consequence of low health knowledge, when measuring blood pressure control in this population, it is also at a disadvantage in those with inadequate SL (BORGES et al., 2019; LIMA et al., 2020).

Another theme that was strongly observed as a result of the present study is the role of educational interventions in health as a strong potentiator for improving the level of HL. Receiving health information from qualified professionals, whether through television, information leaflets and even the internet, positively favors HL and health self-care in people with hypertension. (LIMA et al., 2020). As can be seen in Table 2.

Price-Haywood et al. (2017) and Sany et al. (2020) evaluated the level of HL in people with hypertension after undergoing knowledge intervention directly or through health professionals. The first study observed the performance of users of an electronic portal developed especially for individuals with arterial hypertension. From this, it was possible to identify that SL rates were lower among those who did not use the portal, compared to those who did. The second analyzed the performance of patients who underwent treatment with doctors previously trained specifically with the objective of better guiding and awakening the HL in patients with arterial hypertension.

Thus, attitudes such as assessing the patient's context, identifying the difficulties that prevent them from establishing ideal communication, encouraging the patient to

ask questions, involving them in their care plan, evaluating the barriers they face in the face of pharmacological treatment and change of habits and how to overcome them were essential for a positive result in the control group, also impacting directly on the result of hypertension.

To promote patient autonomy through new means of communication and changing professional care, making them the protagonist of their care and placing them at the center of decision-making is essential for the development of HL and also of self-care. The influence that the HL has in favoring pharmacological self-care is already proven, a very important conclusion since most people with arterial hypertension have other comorbidities, especially in those who are older (SANY et al., 2020; QIU et al., 2020, GRAVILOVA et al., 2019; WARREN-FINDLOW et al., 2019).

Another result pointed out was the influence of educational health intervention, which is easily reflected in the patient's self-care, evidenced by better adherence to continuous use medications, also starting to include physical activities and healthy eating in the routine, primordial attitudes for the treatment of chronic diseases. like hypertension. A study demonstrated the correlation between non-adherence to hypertension control measures and the level of SL, and identified that patients with better SL may have greater adherence to medications (HEIZOMI et al., 2020; PARK et al., 2018). Shi et al. (2017) complements highlighting the SL as an essential factor for the control of hypertension and secondary diseases triggered by it.

In contrast, Saqlain et al. (2019) found that despite the predominance of inadequate HL in their sample, 98.3% of the population studied had good medication adherence. The justification attributed to this result

	Title	Author	Magazine	Year	Conclusion
PHARMACOLOGICAL CARE	Differences in the Associations Between Health Literacy and Medication Adherence in Hypertension: A Population-Based Survey in Heris County, Iran.	Heizomi et al	Vasc Health	2020	Investigates the relationship between medication adherence and level of LS; the LS was considered a predictor item for medication adherence
	The effects of medication adherence and health literacy on health-related quality of life in older people with hypertension.	Park et al.	Int J Older People Nursing	2018	The results of this study indicate significant relationships between medication adherence and LS in elderly people with hypertension.
	Association between health literacy and hypertension management in a Chinese community: a retrospective cohort study.	Shi et al.	Intern Emerg Med	2017	Factors such as education level and regular medication use are significantly associated with SL
	The Relationship Between Health Literacy, Social Support, Depression, and Frailty Among Community-Dwelling Older Patients With Hypertension and Diabetes in China.	Liu et al.	Front Public Health	2020	The inadequate level of HL can contribute to depression and frailty in the elderly with hypertension, impairing self-care, including pharmacological.
	Functional health literacy in hypertensive elders primary health care.	Costa et al.	Rev Bras Enfermagem	2019	As for non-adherence, or partial adherence, to exercise and diet, they had a higher prevalence, were related to inadequate SL, since the patient cannot associate the importance of these habits for the adequate control of the disease.
	Acceptance of illness mediate the effects of health literacy on self-management behaviour.	Qiu et al.	Eur J Cardiovasc Nursing	2020	It identified the SL as a variable of positive influence in the management of pharmacological self-care.
	Medication Adherence and Its Association with Health Literacy and Performance in Activities of Daily Livings among Elderly Hypertensive Patients in Islamabad, Pakistan.	Saqlain et al	Medicina (Kaunas)	2019	A significant part of the sample showed good medication adherence, despite the low level of SL.

Table 3: Articles dealing with the results in pharmacological care obtained through the LS.

Source: From the author, 2021.

would be the cognitive capacity, a variable also measured in the study. This being a fundamental resource to improve the LS.

Considering the perspective of adherence to pharmacological treatment and HL in the context of the elderly. A study identified that only 3.9% of elderly people with hypertension had adequate SL. This result reflects the fragility of the elderly in the face of these issues (LIU et al., 2020).

Observing the Brazilian reality, the results are in line with other nations, representing inadequate SL among those with low medication adherence (54.6%), ineffective blood pressure control, and non-adherence or partial adherence to physical exercises and diets. (84.2%), important habits in the control of arterial hypertension (COSTA et al., 2019).

## FINAL CONSIDERATIONS

From the results of this study, it was possible to observe that important factors to influence LS are indicated by sociodemographic data such as (age, schooling, income), educational interventions focused on health education (use of applications, courses, information leaflets aimed at for understanding their own health), emphasizing the elderly, who have, in most cases, conditions that lack adequate LS, such as, for example, multiple comorbidities. It is valid to suggest scientific productions on this theme, in the national and international follow-up and approached from the perspective of the multidisciplinary health team.

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