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Original Article

Adherence to pharmacological treatment and quality of life in hypertensive patients*

Adesão ao tratamento farmacológico e qualidade de vida em hipertensos

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ABSTRACT

Objective: to assess and associate drug treatment adherence with quality of life in users with arterial hypertension monitored by primary care. **Methods**: a cross-sectional analytical study with 378 hypertensive individuals. The data were collected using the Morisky Medication Adherence Scale and the World Health Organization Quality of Life questionnaire. For inferential analysis, the Kolmogorov-Smirnov test was used, as well as Student's t, Mann-Whitney U for binary variables and ANOVA or Kruskal-Wallis for multiple categories. **Results**: regarding therapeutic adherence, moderate adherence predominated. As for quality of life, high values were observed in all four domains assessed. The analysis of the association between adherence and quality of life revealed a significant correlation with the "environment" and "psychological" domains. **Conclusion**: adherence to treatment plays a fundamental role in hypertensive individuals' quality of life, especially in psychological and environmental aspects. **Contributions to practice:** the data are essential for interventions in therapeutic adherence and quality of life for hypertensive people; therefore, we recommend that Primary Care professionals focus their efforts on increasing therapeutic adherence among this population.

Descriptors: Hypertension; Medication Adherence; Quality of Life; Primary Health Care.

RESUMO

Objetivo: avaliar e associar a adesão ao tratamento medicamentoso com a qualidade de vida de usuários com hipertensão arterial acompanhados pela atenção primária. **Métodos**: estudo transversal analítico realizado com 378 pessoas com hipertensão. Os dados foram coletados por meio da Escala de Adesão ao Tratamento Medicamentoso de Morisky e o questionário *World Health Organization Quality of Life*. Para análise inferencial, utilizou-se o teste Kolmogorov-Smirnov, assim como os testes Teste t de Student, U de Mann-Whitney para variáveis binárias e ANOVA ou Kruskal-Wallis para múltiplas categorias. **Resultados**: quanto à adesão terapêutica, predominou a moderada. Em relação à qualidade de vida, observaram-se valores elevados nos quatros domínios avaliados. Na análise da associação entre a adesão e a qualidade de vida, revelou-se uma correlação significativa com os domínios "meio ambiente" e "psicológico". **Conclusão**: a adesão ao tratamento desempenha um papel fundamental na qualidade de vida de indivíduos com hipertensão, sobretudo nos aspectos psicológico e ambiental. **Contribuições para a prática:** os dados são essenciais para intervenções na adesão terapêutica e qualidade de vida de pessoas com hipertensão, logo, recomenda-se que os profissionais da Atenção Primária à Saúde centrem os esforços em ampliar a adesão terapêutica desse público.

Descritores: Hipertensão; Adesão à Medicação; Qualidade de Vida; Atenção Primária à Saúde.

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Introduction

Arterial hypertension, of multifactorial nature, is one of the greatest contemporary challenges for public health, as it is strongly associated with the occurrence of cardiovascular diseases and premature mortality, despite being a largely preventable condition[1-2]. This condition is responsible for approximately 10.8 million deaths annually and 235 million disability-adjusted life years lost globally. In Brazil, cardiovascular diseases associated with arterial hypertension are the leading causes of mortality and disability, reinforcing the need for effective control of arterial hypertension to reduce its prevalence in public health[3-4].

Meanwhile, insufficient adherence to pharmacological treatment remains one of the main obstacles to the effective control of hypertension, especially in less economically developed contexts[5]. Adherence, defined as the alignment of patient behavior with medical recommendations regarding the dose, frequency, and duration of medication, is essential for therapeutic success in chronic conditions such as hypertension. Factors such as age, gender, education level, and social support have a significant impact on adherence, highlighting the need for strategies that consider these variables to improve disease control and the quality of life of hypertensive patients, given that, according to the World Health Organization[6], lack of adherence to adequate hypertension treatment directly impairs blood pressure control and directly compromises the quality of life of these patients.

At an individual level, persistently elevated blood pressure consistently increases the likelihood of cerebrovascular events, acute myocardial infarction, heart failure, and chronic kidney disease, in addition to reducing quality of life through acute and chronic complications. Recent guidelines reinforce that early detection (including out-of-office monitoring), a combination of non-pharmacological interventions and appropriate pharmacological therapies, and continuous blood pressure control are proven strategies to reduce the incidence of these complications and associated mortality[7-8].

Regarding quality of life, arterial hypertension significantly impacts individuals' perception of well-being and functionality. Research conducted in Bulgaria revealed that not only comorbidities, but also psycho-emotional factors and pain, worsen the experience of people living with the disease. This evidence reinforces that, in addition to hemodynamic control, interventions should include support for the psychosocial and physical state of patients to preserve or improve their quality of life[9].

In this context, Primary Health Care, from the perspective of arterial hypertension, represents one of the central challenges for health systems, making it essential that primary care be strengthened for adequate detection, monitoring, and follow-up[10].

Therefore, the present study aims to assess and associate drug treatment adherence with quality of life in users with arterial hypertension monitored by primary care.

Methods

Type of study

This is an analytical cross-sectional study conducted in accordance with the international protocol Strengthening the Reporting of Observational Studies in Epidemiology (STROBE).

Study location

Research conducted in the municipality of Caxias, MA, Brazil, involving people with hypertension treated in Family Health Strategy (FHS) units in the urban area.

Population and sample

The study population consisted of hypertensive patients enrolled in the hypertension monitoring program who resided in and received care at FHSs in the urban area of Caxias, Maranhão. According to updated data from the Primary Care Coordination, the hyper-

tensive population in 2023 comprised 28,484 individuals, with 23,766 in the urban area and 4,718 in the rural area of the municipality.

To determine the sample size, the sample calculation for finite populations was used, with a sampling error of 5% and a confidence level of 95%, resulting in a sample of 378 individuals with hypertension, who were stratified proportionally across the 43 FHS teams in the municipality.

The inclusion criteria were individuals with hypertension of both genders, aged ≥ 18 years, diagnosed at least six months prior. Those who could not be located after three attempts were excluded.

Study variables

For this study, adherence to antihypertensive treatment and quality of life were considered as dependent variables, and the domains of the World Health Organization Quality of Life – Bref (WHOQOL--BREF) were used as explanatory variables, showing that these dimensions are independently associated with adherence, even when controlling for other variables in the model.

Data collection instruments

To assess adherence to medication treatment, the Morisky Medication Adherence Scale (MMAS-8) was used, an instrument widely employed in studies on therapeutic behavior. This scale consists of eight questions, seven of which are dichotomous, with "yes" or "no" answers, and the last is a five-point Likert scale to assess the frequency of forgetting to take medication. The sum of the responses generates a score from 0 to 8, which allows adherence to be classified as low (<6 points), moderate (6 to <8 points), or high (8 points). It is a validated and easy-to-apply instrument that allows the identification of behavioral barriers related to therapeutic adherence[11-12].

The MMAS-8 assesses behaviors and attitudes related to medication use, encompassing aspects of forgetfulness, intentional interruption, and treatment perception. Its eight items investigate everything from occasional forgetfulness and interruption due to feeling well or unwell, to logistical difficulties such as forgetting medication when leaving home.

To measure quality of life, the World Health Organization Quality of Life – Bref (WHOQOL-BREF), an abbreviated version of the WHOQOL-100 developed by the World Health Organization, was applied. The WHOQOL-BREF consists of 26 items organized into four domains: physical, psychological, social relationships, and environment, and includes two general questions that address the overall perception of quality of life and satisfaction with one's own health. Each item is assessed using a five-point Likert-type scale, which expresses intensity, capacity, frequency, or assessment, depending on the nature of the question. The scores are transformed into a scale of 0 to 100, where higher values indicate a better perception of quality of life[11-12].

A questionnaire was used to collect sociodemographic data and data related to medication use, containing sociodemographic, clinical, and medication use-related questions. Sociodemographic variables included age (in years), gender (male or female), race (white, black, brown, Asian, or indigenous), religion (Catholic, Protestant, Umbanda/Candomblé, other, or none), education level (literate or illiterate), marital status (single, separated, divorced, widowed, or married/in a stable union), family composition — whether they live with a family member or friend and, if so, with whom (siblings, parents, children, friends, or spouse) — current occupation, and monthly income in reais.

Questions regarding medication use and clinical characteristics included the time since hypertension diagnosis (in years), the number of medications used in the last six months, the duration of hypertension treatment (in years), the number of pills taken per day (one, two, three, or more than four pills), and the daily frequency of medication use (one, two, three, or more than four times a day). These variables allowed for the characterization of the participants' profile and the analysis of the relationships between sociodemographic factors, medication use, and therapeutic adherence.

Period and data collection

Data collection took place between March and August 2024, during visits by Community Health Agents (CHAs) to the homes of users with hypertension. During the application of the instruments, which were completed by the researchers, in addition to filling out the form and questionnaires, three blood pressure measurements were taken from each individual. The first measurement was discarded as a way to prevent white coat hypertension.

Initially, it was proposed that data collection be carried out in a room or chamber of the health unit. However, this technique was modified due to the low demand from users in the health units. Therefore, it was decided to conduct the interviews during home visits with the CHA. However, the privacy, comfort, and anonymity of the research participants were maintained, as they were approached in their homes and duly informed about the research.

Data analysis

The data were tabulated in Microsoft Excel® 365 and analyzed using SPSS version 26. Descriptive analysis included absolute and percentage frequencies for qualitative variables, as well as measures of position (mean) and dispersion (standard deviation) for quantitative variables. For inferential analysis, the normality of the data was verified using the Kolmogorov-Smirnov test. The comparison of WHOQOL-BREF scores with the variables from the data collection form used Student's t-test, Mann-Whitney U test for binary variables, and Analysis of Variance (ANOVA) or Kruskal-Wallis test for multiple categories. A significance level of 5% ($p<0.05$) was adopted.

Ethical aspects

The research was approved by the Research Ethics Committee of the Federal University of Piauí, under opinion number 6,626,736/2024, Certificate of Presentation for Ethical Appreciation number 76276523.3.0000.8057.

Results

Among the 378 people who comprised the sample, the majority were women, elderly (over 60 years old), brown, catholic, literate, married or in a stable union, living with a family member/friend, and residing mainly with their children. Most were retired, with an average income of one minimum wage (Table1).

Table 1 – Characterization of the sociodemographic and economic profile (n=378). Caxias, MA, Brazil, 2024

Variables	n (%)	95% CI*
Gender		
Male	115 (30.4)	25.9-35.2
Female	263 (69.6)	64.8-74.1
Age range (years)†		
20-59	101 (26.7)	22.4-31.3
≥60	277 (73.3)	68.7-77.6
Self-declared color		
White	75(19.8)	(16.1-24.1)
Black	85 (22.5)	(18.5-26.9)
Brown	216 (57.1)	(52.1-62.1)
Asian	2 (0.5)	(0.1-1.7)
Religion		
Catholic	281 (74.3)	(69.8-78.5)
Protestant	83 (22.0)	(18.0-26.3)
Umbanda/Candomblé, other	9 (2.4)	(1.2-4.3)
No religion	5 (1.3)	(0.5-2.9)
Education level		
Literate	227 (60.1)	(55.1-64.9)
Iliterate	151 (39.9)	(35.1-44.9)
Marital status		
Single/separated/divorced/widowed	184 (48.9)	(43.9-54.0)
Married/stable union	192 (51.1)	(46.0-56.1)
Lives with a relative/friend		
Yes	347 (91.8)	(88.7-94.2)
Who does he/she live with		
Siblings	16 (4.6)	(2.8-7.2)
Father and mother	26 (7.5)	(5.1-10.6)
Son	207 (59.7)	(54.4-64.7)
Friend	4 (1.2)	(0.4-2.7)
Spouse	189 (54.5)	(49.2-59.7)
Grandson	78 (22.5)	(18.3-27.1)
Occupation		
Retired	236 (62.4)	(57.5-67.2)
Continuous Benefit Payment/Pensioner	11 (2.9)	(1.6-5.0)
Domestic Worker	10 (2.6)	(1.4-4.6)
Housewife	52 (13.8)	(10.6-17.5)
Other	69 (18.3)	(14.6-22.4)
Income‡		

*CI: Confidence interval for the mean, at the 5% level; †Mean: 66.95, Median: 68.00, Standard Deviation: 13.38; ‡Mean: 1603.30, Median: 1412.00, Standard Deviation: 831.34

The mean score on the MMAS-8 scale was 5.59, with 229 individuals (60.6%) showing moderate adherence to treatment and only one (0.3%) achieving high adherence. Quality of life was assessed in four domains, and all achieved good performance (means above 80.00), with the "social relationships" domain standing out, followed by "psychological", "physical", and "environment". The overall mean WHOQOL-BREF score was 3.63, with a standard deviation of 0.38 Table 2.

Table 2 – Characterization of the Morisky 8-item Therapeutic Adherence Scale score and WHOQOL-BREF quality of life score (n=378). Caxias, MA, Brazil, 2024

Variables	n (%)	95% CI*	Mean	Median	SD
MMAS-8			5.59	6.00	1.48
Low	148 (39.2)	(34.3-44.1)	-	-	-
Moderate	229 (60.6)	(55.6-65.4)	-	-	-
High	1 (0.3)	(0.0-1.2)	-	-	-
WHOQOL-BREF					
Physical	-	-	89.37	92.86	13.75
Psychological	-	-	93.35	95.83	12.35
Social relationships	-	-	94.64	100.00	13.30
Environment	-	-	86.05	87.50	10.88
WHOQOL-Mean	-	-	3.63	3.71	0.38

*CI: Confidence interval for the mean, at the 5% level; WHOQOL-BREF: World Health Organization Quality of Life – Bref; MMAS-8: Morisky Medication Adherence Scale; SD: Standard Deviation

When analyzing the association between therapeutic adherence and quality of life in people with hypertension, a significant association was observed between adherence and the "psychological" and "environmental" domains. However, the "physical" and "social relationships" domains did not show significant differences between the groups with different levels of adherence (Table 3).

Through logistic regression analysis, it was observed that the WHOQOL-BREF domains showed a significant association with adherence to medication treatment, indicating that higher levels of quality of life were related to greater adherence, regardless of the other variables included in the model.

The Chi-square test values result from a simple comparison analysis between the low and moderate/high adherence groups (hypothesis test for difference of means/medians). The second p-value refers to the Wald test applied in the logistic regression, in which adherence was considered the dependent variable and the quality of life domains were included as explanatory variables. Thus, the first p-value indicates whether there is a difference between the groups, while the second confirms, in the regression model, whether the assessed domain is independently associated with adherence (Table 3).

Table 3 – Association between the Morisky 8-item Therapeutic Adherence Classification - MMAS-8, and quality of life - WHOQOL-BREF (n=378). Caxias, MA, Brazil, 2024

Domains	Low adherence		Moderate/High adherence		p-value*	p-value†	OR-95%
	Mean±SD	Median	Mean±SD	Median			
Physical	87.81±14.02	92.86	90.37±13.51	92.86	0.117		1.024 (1.007-1.041)
Psychological	91.16±13.40	95.83	94.77±11.43	100.00	0.011	0.006	1.024 (1.007-1.041)
Social relationships	94.14±10.97	100.00	94.96±14.62	100.00	0.674		1.041 (1.021-1.62)
Environment	83.22±11.99	84.38	87.87±9.69	87.50	0.001	<0.001	1.041 (1.021-1.62)

*Chi-square test, with Yates correction, at the 5% level; †Wald test, at the 5% level; SD: Standard Deviation; OR: Odds Ratio

Discussion

The Brazilian Guidelines on Hypertension highlight the significant increase in the prevalence of the disease after the age of 60, particularly among women, who often have higher blood pressure levels. In addition, there has been a 5% increase in the proportion of elderly people in the Brazilian population, reinforcing the context of demographic and epidemiological transition in the country. This scenario highlights the impact of population aging on the increase in chronic noncommunicable diseases, such as hypertension, particularly in the elderly population[13].

The prevalence of brown skin color among participants can be justified because data indicate that 45.3% of the Brazilian population declared themselves brown, with a higher concentration in the North and Northeast[11]. This regional distribution influences the findings, as do studies that hypertension disproportionately affects the black and brown population, being associated with higher prevalence, severity, and difficulties in controlling blood pressure, even with treatment. This disparity results from genetic and socioeconomic factors, unequal access to healthcare, chronic stress, and less healthy lifestyle habits[3,14-15]. Therefore, the implementation of public policies and strategies aimed at the prevention and management of hypertension is essential, reducing inequalities and improving cardiovascular outcomes.

When assessing the participants' adherence level, a prevalence of moderate adherence to treatment was found, with only one participant achieving high adherence. This scenario aligns with a study that analyzed the relationship between functional health literacy and adherence to drug treatment for hypertension in Primary Health Care[16]. In this study, 24.1% of participants did not adhere correctly to treatment, while 80.3% presented low functional health literacy, highlighting the influence of factors such as the complexity of the therapeutic regimen and the understanding of the health professionals' guidelines.

In terms of quality of life, high scores were found, particularly in the "psychological" and "social relationships" domains. This differs from a study of elderly people with hypertension and type II diabetes mellitus, which identified the "physical" domain as the most compromised due to limitations imposed by chronic conditions[17]. However, another similar study, which assessed the quality of life of primary health care users aged 60 and over with hypertension and/or diabetes, observed higher scores in the "social relationships" and "physical" domains, while the "environment" and "psychological" domains showed the lowest values, indicating differences in perceptions of quality of life among the participants[18].

Variables and factors such as age, duration of antihypertensive treatment, low social support, physical inactivity, comorbidities, being widowed, and being single showed a significant association with lower health-related quality of life[17].

Non-pharmacological factors, such as the level of health education, knowledge about the complications of hypertension, the habit of self-monitoring blood pressure, and continuous follow-up with healthcare professionals such as doctors and pharmacists, have a positive influence on treatment adherence and the quality of life of people with hypertension. These aspects contribute to strengthening patient engagement in their own care, broadening their understanding of treatment, and promoting effective disease control[19].

Similarly, insufficient levels of health literacy regarding hypertension were identified in hypertensive individuals from a Chinese community, with 23.2% of participants classified as having low literacy and 76.8% as having a moderate level, with no records of a level considered sufficient. Furthermore, social support was shown to play a mediating role in the relationship between health literacy and quality of life, indicating that individuals with a greater capacity to understand information about hypertension and with a better social support network tend to exhibit higher levels of physical, psychological, and social well-being[20].

Significant correlations were also identified between treatment adherence and the social rela-

tionships domain of the WHOQOL-BREF, revealing that most participants showed moderate adherence to hypertension treatment, which was directly associated with blood pressure control. It was observed that elderly patients, those with a longer duration of hypertension diagnosis, and those using once-daily medication showed better treatment adherence. Furthermore, individuals without comorbidities and with a positive perception of the benefits of treatment demonstrated higher levels of adherence, which were reflected in better quality of life scores, especially in the "psychological" and "social relationships" domains[21].

Similarly, a study conducted in Saudi Arabia with 300 hypertensive individuals with an average age of 56.76 years observed that higher levels of adherence were associated with better scores in the physical and psychological domains, highlighting adherence as an independent predictor of quality of life[22].

Thus, the health-related quality of life of patients with hypertension is not only affected by the disease itself, but also by some subjective factors, such as low health literacy[23]. These findings indicate that, although there are variations in results between studies, the differences can be attributed to the specificities of the populations studied, types of chronic diseases, and distinct cultural contexts. Therefore, it is essential to consider these factors when planning interventions aimed at improving treatment adherence and promoting a better quality of life for people with arterial hypertension.

Although available antihypertensive medications have proven efficacy, there remains a need for complementary strategies that are more effective in certain patient profiles, as well as additional resources for managing the disease. In this context, adopting healthy lifestyle habits, such as maintaining an appropriate body mass index, eating a balanced diet, not smoking, consuming alcohol in moderation, controlling sodium intake, and reducing sedentary behavior, has the potential to reduce systolic blood pressure levels by an average of 3.5 mmHg, and may also decrease the risk of cardiovascular disease by approximately 30%, regardless of genetic predisposition to developing arterial hypertension[24].

The American Heart Association emphasizes that, although treatment for arterial hypertension has advanced, therapeutic non-adherence still represents a significant barrier to achieving population-based control goals. The document highlights the challenges in measuring adherence, considering self-reported and observational methods as limited, and emphasizes pharmaceutical refill data as a more robust approach. Risk factors for non-adherence are analyzed, organized according to the World Health Organization model, encompassing components related to the patient, treatment, health system, clinical condition, and socioeconomic context[25].

The results of this study indicated a predominance of moderate therapeutic adherence among participants and high quality of life scores, especially in the "psychological" and "social relationships" domains. This positive association between adherence and improved perception of quality of life reinforces the importance of continuous management of hypertension, since treatment adherence is a central element for clinical stability and the subjective well-being of affected individuals. Similar findings were observed in a multicenter study conducted in India, in which higher levels of adherence were related to better scores in the psychological and physical domains of the WHOQOL-BREF, demonstrating that commitment to treatment directly reflects the perception of health and vitality of hypertensive patients[26].

The significant association between adherence and the "psychological" and "environmental" domains found in this study demonstrates that emotional and contextual aspects, such as social support, safety, and access to health services, influence the perception of quality of life. Research conducted in Bulgaria identified a similar pattern, showing that patients with greater involvement in self-care and emotional stability reported better quality of life and less disease-related stress[27]. Such evidence reinforces the hypothesis that adherence is not limited to the correct use of medi-

cation, but reflects a set of self-control behaviors and acceptance of the chronic condition that manifest positively in mental health.

On the other hand, the absence of a significant association between therapeutic adherence and the physical and social domains suggests that maintaining quality of life in these aspects may depend on different factors, such as the presence of comorbidities, functional limitations, and family dynamics. In a study conducted in China with over 1,000 hypertensive individuals followed in primary care, it was found that advanced age, low education level, and multiple pathologies were predictors of lower scores in the physical and environmental domains, regardless of the level of adherence[28]. These results corroborate the importance of contextual analyses that consider the heterogeneity of the hypertensive population and their social conditions.

The prevalence of moderate adherence observed in this research is consistent with global estimates described by the American Heart Association, which record adherence rates between approximately 40% and 65% in low- and middle-income countries. However, even moderate levels of adherence can have a positive impact on the perception of quality of life, as observed in this study, especially when follow-up is carried out in Primary Care units, where there is a stronger bond between professionals and users and the promotion of self-care is prioritized. This relationship was also confirmed by research conducted in Brazil, which showed that systematic monitoring of hypertensive patients by Family Health Strategy teams contributes to better blood pressure control and improved self-assessment of health[26].

Study limitations

Regarding limitations, this is a cross-sectional study conducted during a period in which the health units included in the research could have had people with hypertension with unsatisfactory treatment adherence, given the possibility of prevalence bias, even though this measure was not estimated. Also, the difficulties encountered in data collection — such as scheduling home visits and the time required to complete questionnaires — can be considered limitations of this survey.

Contributions to practice

By identifying factors associated with moderate adherence and their direct relationship with the psychological and environmental domains of quality of life, the strategic role of nursing in implementing educational interventions, strengthening the professional-patient bond, and providing longitudinal and humanized follow-up becomes evident. These findings support the development of patient-centered health education initiatives focused on enhancing treatment understanding, simplifying therapeutic regimens, and strengthening self-care practices. They also underscore the importance of integrating innovative approaches, such as remote monitoring technologies, integrative health practices, and psychosocial support, into conventional models of care.

From a practical and theoretical standpoint, the results contribute to improving the monitoring protocols for people with hypertension within the Family Health Strategy teams, guiding the development of personalized care plans based on clinical and subjective indicators of well-being. Furthermore, they broaden the understanding of the interdependence between adherence and quality of life, strengthening the evidence that supports multidisciplinary and educational interventions aimed at promoting autonomy, therapeutic bonding, and co-responsibility in care, essential pillars for the effective control of hypertension and the sustainable improvement of quality of life.

Conclusion

Adherence to drug treatment was moderate, and quality of life domains were considered good. Adherence to medication treatment exerted a significant in-

fluence on quality of life in people with arterial hypertension followed-up in Primary Health Care, especially in the "psychological" and "environmental" domains.

Authors' contributions

Conception and design or data analysis and interpretation; Manuscript drafting or critical revision of relevant intellectual content; Responsibility for all aspects of the text to ensure the accuracy and integrity of any part of the manuscript**: Santos FAV**. Final approval of the version to be published: **Oliveira CJ, Macêdo SF, Melo MM**. Final approval of the version to be published; Responsibility for all aspects of the text to ensure the accuracy and integrity of any part of the manuscript: **Silva ARV**.

Data availability

All the data supporting the results of this study are available in the institutional repository of the Federal University of Piauí and can be accessed upon request from the corresponding author.

References

1. Barroso WKSP, Rodrigues CIS, Bortolotto LA, Mota-Gomes MA, Brandão AA, Feitosa ADM, et al. Brazilian Guidelines of Hypertension – 2020. Arq Bras Cardiol. 2021;116(3):516-58. doi: https://doi.org/10.36660/abc.20201238
2. Malachias MVB. The new paradigm of blood pressure measurement. Arq Bras Cardiol. 2021;117(3):528-30. doi: https://doi.org/10.36660/abc.20210592
3. Malta DC, Bernal RTI, Ribeiro EG, Moreira AD, Felisbino-Mendes MS, Velásquez-Meléndez JG. Arterial hypertension and associated factors: National Health Survey, 2019. Rev Saúde Pública. 2022;56:122. doi: https://dx.doi.org/10.11606/s1518-8787.2022056004177
4. Malta DC, Pinheiro PC, Teixeira RA, Machado IE, Santos FM, Ribeiro ALP. Cardiovascular risk estimates in ten years in the brazilian population, a population-based study. Arq Bras Cardiol. 2021;116(3):423-31. doi: https://dx.doi.org/10.36660/abc.20190861
5. Coelho JC, Guimarães MCLP, Vaz AKMG, Meira KC, Santos J, Lee RJW, et al. Adherence to antihypertensive drug treatment in Brazil: a systematic review and meta-analysis. Ciênc Saúde Colet. 2024;29:e19282022. doi: https://doi.org/10.1590/1413-81232024298.19282022EN
6. Organização Pan-Americana da Saúde (OPAS). Relatório lançado pela OMS detalha o impacto devastador da hipertensão e as formas de combatê-la [Internet]. 2023 [cited Aug 6, 2025]. Available from: http://www.paho.org/pt/noticias/19-9-2023-relatorio-lancado-pela-oms-detalha-impacto-devastador-da-hipertensao-e-formas
7. Mancia G, Backer G, Dominiczak A, Cifkova R, Fagard R, Germano G, et al. 2023 ESH Guidelines for the management of arterial hypertension. J Hypertens. 2023;41(12):1874-2071. doi: https://doi.org/10.1097/HJH.0000000000003480
8. McEvoy JW, Abreu A, Olsen MH, Ambrosetti M, Androulakis E, Bang LE, et al. 2024 ESC Guidelines for the management of elevated blood pressure and hypertension. Eur Heart J. 2024;45(38):3912-4018. doi: https://doi.org/10.1093/eurheartj/ehae178
9. Naseva E, Ramshev K, Ramshev N, Shtereva-Tzouni D, Gardeva M, Vodenicharov V. Younger hypertensive patients have lower health-related quality of life and different hypertension correlates. Evidence from Bulgaria. J IMAB. 2024;30(3):5738-47. doi: https://doi.org/10.5272/jimab.2024303.5738
10. Palmeirim MS, Baxter YC, Silveira M, Maggion RV, Aquino B, Avezum Á, et al. Situational analysis of hypertension management at primary health care level in São Paulo, Brazil: population, healthcare professional and health system perspectives. BMC Health Serv Res. 2024;24:668. doi: https://doi.org/10.1186/s12913-024-10978-1
11. Fleck MPA, Louzada S, Xavier M, Chachamovic E, Veira G, Santos L, et al. Aplicação da versão em português do instrumento abreviado de avaliação da qualidade de vida WHOQOL-bref. Rev Saúde Pública. 2000;34(2):178-83. doi: https://dx.doi.org/10.1590/S0034-89102000000200012

12. Oliveira-Filho AD, Barreto-Filho JA, Neves SJF, Lyra Junior DP. Association between the 8-item Morisky Medication Adherence Scale (MMAS-8) and Blood Pressure Control. Arq Bras Cardiol. 2012;99(1):649-58. doi: http://doi.org/10.1590/S0066-782X2012005000053

13. Martins TCF, Silva JHCM, Máximo GC, Guimarães RM. Transição da morbimortalidade no Brasil: um desafio aos 30 anos de SUS. Ciênc Saúde Coletiva. 2021;26(10):4483-96. doi: https://dx.doi.org/10.1590/1413-812320212610.10852021

14. Instituto Brasileiro de Geografia e Estatística (IBGE). Censo Demográfico 2022: população e domicílios [Internet]. 2022 [cited Aug 6, 2025]. Available from: https://biblioteca.ibge.gov.br/index.php/biblioteca-catalogo?id=2102011&view=detalhes

15. Barroso WKS, Brandão AA, Miranda RD, Mascarenhas J, Malachias MVB. Influence of racial composition on blood pressure control in the Brazilian population: the need for new perspectives beyond drug treatment. Arq Bras Cardiol. 2022;118(3):623-4. doi: https://doi.org/10.36660/abc.20220063

16. Sousa CT, Souza AM, Mill JG, Cardoso LO, Lotufo PA, Bensenor IM. Racial differences in blood pressure control from users of antihypertensive monotherapy: results from the ELSA-Brasil Study. Arq Bras Cardiol. 2022;118(3):614-22. doi: https://dx.doi.org/10.36660/abc.20201180

17. Adamu K, Feleke A, Muche A, Yasin T, Mekonen AM, Chane MG, et al. Health related quality of life among adult hypertensive patients on treatment in Dessie City, Northeast Ethiopia. PLoS One. 2022;17:e0268150. doi: http://doi.org/10.1371/journal.pone.0268150

18. Luz ALA, Silva-Costa A, Barbosa EL, Marques LP, Souto EP, Griep RH. Cognitive function and blood pressure control in elderly hypertensive individuals. Ciênc Saúde Colet. 2022;27(6):2269-78. doi: https://dx.doi.org/10.1590/1413-81232022276.18382021

19. Suciu L, Suciu M, Voicu M, Mureşan R, Pârv FV, Buda V, et al. Factors influencing adherence to treatment and quality of life for a group of patients with essential hypertension in Romania. Patient Prefer Adherence. 2021;15:483-91. doi: https://doi.org/10.2147/PPA.S269119

20. Wang Y, Chen T, Gan W, Yin J, Song L, Qi H, et al. Association among high blood pressure health literacy, social support and health- related quality of life among a community population with hypertension: a community- based cross- sectional study in China. BMJ Open. 2022;12(6):e057495. doi: https://doi.org/10.1136/bmjopen-2021-057495

21. Kishor R, Kumari S, Prakash R, Chaudhary N, Shyama S, Ahmad S, et al. An assessment of treatment compliance using the Morisky scale-8 tool in adult hypertensive patients of Eastern India. J Family Med Prim Care. 2024;13(3):924-31. doi: https://doi.org/10.4103/jfmpc.jfmpc_1416_23

22. Alsaqabi YS, Rabbani U. Medication adherence and its association with quality of life among hypertensive patients attending primary health care centers in Saudi Arabia. Cureus. 2020;12(12):e11853. doi: https://doi.org/10.7759/cureus.11853

23. Carvalho TR, Ribeiro LC. Associação entre letramento funcional em saúde e adesão ao tratamento medicamentoso da hipertensão arterial sistêmica na atenção primária à saúde. Rev APS. 2020;23(4). doi: http://doi.org/10.34019/1809-8363.2020.v23.16894

24. Zhang Q, Huang F, Zhang L, Li Sasha, Zhang J. The effect of high blood pressure-health literacy, self-management behavior, self-efficacy and social support on the health-related quality of life of Kazakh hypertension patients in a low-income rural area of China: a structural equation model. BMC Public Health. 2021;21(1):1114. doi: https://doi.org/10.1186/s12889-021-11129-5

25. Ojangba T, Boamah S, Miao Y, Guo X, Fen Y, Agboyibor C, et al. Comprehensive effects of lifestyle reform, adherence, and related factors on hypertension control: a review. J Clin Hypertens (Greenwich). 2023;25(6):509-20. doi: http://doi.org/10.1111/jch.14653

26. Choudhry NK, Kronish IM, Vongpatanasin W, Ferdinand KC, Pavlik VN, Egan BM, et al. American Heart Association Council On Hypertension; Council On Cardiovascular And Stroke Nursing; Council On Clinical Cardiology. Medication adherence and blood pressure control: a scientific statement from the American Heart Association. Hypertension. 2022;79(1):e1–14. doi: http://doi.org/10.1161/HYP.0000000000000203

27. Ghayadh A, Naji AB. Treatment adherence and its association to quality of life among patients with hypertension. Pak Heart J [Internet]. 2023 [cited Aug 13, 2025];56(2):44-9. Available from: https://www.pkheartjournal.com/index.php/journal/article/view/1319/1282/1299

28. Insani WN, Wei L, Abdulah R, Alfian SD, Ramadhani NA, Andhika R, et al. Exploring the association of adverse drug reactions with medication adherence and quality of life among hypertensive patients: a cross-sectional study. Int J Clin Pharm. 2025;47(2):354-64. doi: http://doi.org/10.1007/s11096-024-01832-9

29. Strumann C, Engler NJ, von Meissner WCG, Blickle PG, Steinhäuser J. Quality of care in patients with hypertension: a retrospective cohort study of primary care routine data in Germany. BMC Prim Care. 2024;25:54. doi: https://doi.org/10.1186/s12875-024-02285-9

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