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ANALYSIS OF RESISTANT HYPERTENSIVE PATIENTS' KNOWLEDGE ABOUT THE RISK OF KIDNEY DISEASE DURING EDUCATIONAL INTERVENTION

ANÁLISE DO CONHECIMENTO DE HIPERTENSOS RESISTENTES SOBRE O RISCO DE DOENÇA RENAL DURANTE INTERVENÇÃO EDUCATIVA

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RESUMO

Objetivo: avaliar o conhecimento dos hipertensos resistentes antes e depois de uma intervenção educativa acerca do risco para a doença renal crônica. **Método:** estudo transversal, com aprovação ética, realizado no período de janeiro de 2022 a outubro de 2024, com 63 hipertensos resistentes, sob atendimento ambulatorial universitário fluminense. Os dados foram coletados em três etapas: no prontuário clínico; no telemonitoramento por meio do questionário *Screening for Occult Renal Disease*; e durante a intervenção educativa presencial. Para a análise, utilizou-se estatística descritiva, testes de Exato de Fisher, *Mann-Whitney* e *Wilcoxon*. **Resultados:** idade ≥ 70 anos (41,3%), 49(77,8%) com predominância feminina, tempo de diagnóstico da hipertensão ≥ 21 anos (41,1%); 61(96,8%) em risco para doença renal. Quanto ao conhecimento de complicações, antes da intervenção, 41 (65%) pessoas relataram desconhecer a relação do risco. Após a intervenção, todos os participantes do estudo declararam tal conhecimento. **Conclusão:** pode-se identificar que houve um conhecimento adquirido após a intervenção educativa sobre o risco de desenvolvimento da doença renal crônica.

Descritores: Educação em Saúde; Hipertensão; Insuficiência Renal Crônica; Conhecimentos, Atitudes e Prática em Saúde; Letramento em Saúde.

ABSTRACT

Objective: to assess the knowledge of resistant hypertensive patients before and after an educational intervention about the risk of chronic kidney disease. **Method:** A cross-sectional study, with ethical approval, conducted from January 2022 to October 2024, with 63 resistant hypertensive patients under outpatient care at a university in Rio de Janeiro. Data were collected in three stages: from medical records; through telemonitoring using the Screening for Occult Renal Disease questionnaire; and during face-to-face educational intervention. Descriptive statistics, Fisher's exact test, Mann-Whitney test, and Wilcoxon test were used for analysis. **Results:** age ≥ 70 years (41.3%), 49 (77.8%) predominantly female, time since diagnosis of hypertension ≥ 21 years (41.1%); 61 (96.8%) at risk for kidney disease. Regarding knowledge of complications, before the intervention, 41 (65%) reported being unaware of the risk. After the intervention, all study participants reported having such knowledge. **Conclusion:** it can be identified that knowledge was acquired after the educational intervention regarding the risk of developing chronic kidney disease.

Descriptors: Health Education; Hypertension; Chronic Renal Failure; Knowledge, Attitudes, and Practices in Health; Health Literacy.

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What is already known:

- High blood pressure is strongly associated with the development of chronic kidney disease;
- Health literacy is essential for self-care.

What this article adds:

- Face-to-face educational intervention, as a health education strategy, carried out by nurses with resistant hypertensive patients emphasizes health literacy regarding the complications and risks of high blood pressure;
- Age ≥ 70 years and the duration of clinical diagnosis of hypertension are risk factors that require better care planning for resistant hypertensive patients;
- Screening for the risk of developing chronic kidney disease is essential in the care of hypertensive patients. In the sample, there was a high prevalence of resistant hypertensive patients at risk for kidney disease.

INTRODUCTION

The association between systemic arterial hypertension (SAH) or high blood pressure and chronic kidney disease (CKD) is recognized in scientific literature[1]. When uncontrolled, hypertension contributes to progressive impairment of kidney function, being both a cause and consequence of CKD[2]. Therefore, early identification of risks and the use of educational strategies are essential for a possible interruption or delay in this progression, promoting better clinical outcomes and quality of life for people[3].

It should be noted that among the most prevalent and challenging chronic conditions for health systems is hypertension, characterized by persistent elevation of blood pressure to levels ≥140/90 mmHg[4]. It is considered one of the main modifiable risk factors, leading to cardiovascular, cerebrovascular, and renal complications. Furthermore, it is responsible for high morbidity and mortality in Brazil and worldwide[5]. According to the 2023 World Health Organization Report, one-third of the adult population worldwide is affected by this chronic and asymptomatic condition. The estimate for Brazil is approximately 50 million people over the age of 30 with the disease[6].

In addition, there is resistant hypertension (RH), defined by persistently high blood pressure levels even with the use of at least three different classes of antihypertensive drugs, including a diuretic. This condition represents an additional challenge to treatment, requiring a more rigorous and individualized approach, as well as careful investigation of secondary causes and contributing factors, such as poor therapeutic adherence and unhealthy lifestyle habits[7].

In this context, with advances in health technologies, new possibilities have emerged to improve and expand the scope of educational activities. Digital tools, applications, audiovisual resources, and interactive platforms are increasingly being used to support educational interventions, making them more attractive, accessible, and effective. Such technologies favor the personalization of approaches, continuous monitoring of results, and the promotion of more efficient communication between health professionals and individuals[8-10].

Educational intervention has established itself as an important tool in the field of health, especially with regard to promoting self-care, preventing diseases, and empowering people to manage chronic conditions. Through well-planned educational strategies, it is possible to raise individuals' critical awareness of their own health, encouraging them to adopt healthier behaviors and adhere to treatment. Health education is no longer a merely informative practice and takes on a transformative role in people's lives[11-13].

For the use of educational strategies, it is understood that the action research methodological approach provides an opportunity to align the principles of educational intervention and the use of technologies. Through its participatory nature, action research involves people as co-authors of the research process, promoting a collective construction of knowledge and generating concrete transformations in the reality studied. This methodology is relevant in the field of health, as it allows for the articulation between theory and practice, research and care, as well as the assessment of knowledge about chronic disease[14].

Lack of knowledge about the disease[15], complications[16] and, above all, the relationship between SAH and CKD[3] can significantly compromise treatment adherence, quality of life, and self-care[17].

Given the above, and in this scientific investigation, the research question was: what is the knowledge of resistant hypertensive patients about the risk of developing CKD? The objective was to analyze the knowledge of resistant hypertensive patients before and after an educational intervention about the risk of CKD.

METHOD

This is a three-stage observational, analytical, cross-sectional, retrospective, quantitative study conducted at a specialized multidisciplinary outpatient clinic at a public university hospital in the state of Rio de Janeiro. The study followed the recommendations of the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) Declaration[18]. It is an integral part of the "Interdisciplinary Project for Virtual Monitoring of Systemic Arterial Hypertension (PISAV_HAS) in the Context of the COVID-19 Pandemic Phase I."

The outpatient clinic has 180 resistant hypertensive patients registered for regular care, of whom 100 were invited to participate in the study, comprising a final non-probabilistic, intentional sample of 63 participants.

The inclusion criteria adopted were: being aged 18 years or older for both sexes. The exclusion criteria were mental impairment and hospitalization at the time of data collection.

After the invitation, reading, acceptance, and signing of the Free and Informed Consent Form (FICF) by the participants, the research began. The study comprised three stages (first, second, and third) over 32 months, from January 2022 to October 2024, with the participation of undergraduate and graduate students, trained and supervised by faculty members.

The first stage consisted of consulting medical records to collect sociodemographic data (gender, age, self-declared skin color, marital status, and education level), clinical

data (dyslipidemia, obesity, and time since diagnosis of SAH), health habits (smoking and alcohol consumption), and information on the last blood pressure reading recorded at the last consultation.

In the second stage, carried out during telemonitoring by telephone, the Screening for Occult Renal Disease (SCORED) questionnaire was administered to estimate the risk of developing CKD. The questionnaire contains 11 questions, each with a specific score. For the age variable, 2 points are assigned to individuals aged 50 to 59, 3 points to those aged 60 to 69, and 4 points to those over 70. The other questions receive 1 point for each affirmative answer regarding the following conditions: being female; having or having had anemia; having hypertension; being diabetic; having a history of heart attack or stroke/CVA; having congestive heart failure; having circulatory problems in the legs; and having protein in the urine in tests. The sum of the scores results in the final score, with a score of 4 points or higher indicating that the individual has a one in five chance of developing CKD.

Finally, the third stage was conducted in person at the clinic on regular days of multidisciplinary consultations, lasting up to 40 minutes. It was organized as follows: participants gathered in the study room of the aforementioned outpatient clinic; they were welcomed and thanked for participating in the research; the dynamics for data collection and educational intervention were explained; the first form (Prior Knowledge), prepared by the researchers, was distributed for self-completion; a TV was used to play an educational video prepared for the research, lasting 5 minutes and 45 seconds; there was a moment of interaction for comments; the second form (Knowledge Self-Assessment) was distributed and applied; and the educational intervention was concluded.

Regarding the content of the forms, different formats were chosen, given the understanding that comparative evaluation was not necessary, but rather the contribution of action research.

Therefore, the Prior Knowledge Form contained two items, the first referring to the question “Can your high blood pressure, without treatment and control, cause complications?”, with the answer options “yes” or “no.” The second item contained five specific statements extracted from the Hypertension Knowledge Level Scale (HKLS), validated in Brazil[19], related to the complications of high blood pressure. The answer options were “Correct,” “Incorrect,” and “Don’t know” for the following statements: “High blood pressure, if left untreated, can cause stroke”; “High blood pressure, if left untreated, can cause heart disease, such as heart attack”; “High blood pressure, if left untreated, can cause premature death”; “High blood pressure, if left untreated, can cause kidney failure”; and “High blood pressure, if left untreated, can cause visual disturbances.”

Meanwhile, in the Knowledge Self-Assessment Form, the questions were directed at self-perception of knowledge before and after the educational intervention. This form contained two questions: “How do you assess your knowledge about the complications of high blood pressure before and after the educational intervention?” and “How do you assess your knowledge about the relationship between high blood pressure and CKD before and after the educational intervention?”, with responses provided on a Likert scale: “I knew nothing”; “I knew little”; “I knew partially”; “I knew a lot”; and “I knew completely”.

For educational intervention, an educational video containing ten slides was structured, using a private YouTube account as a playback tool. The educational content had a script, was reviewed by researchers, and covered the following topics: definition of SAH, treatment of hypertension (medication and non-medication), complications of hypertensive disease, association of SAH as a cause of kidney disease, definition of CKD, treatments for kidney failure (medication, non-medication, and renal replacement therapies), and ending with ways to prevent CKD.

Statistical analyses were performed using Statistical Package for the Social Sciences (SPSS) software, version 22, and R, version 4.3.1, considering a significance level of 5%.

Categorical variables were presented in absolute frequencies and percentages, while numerical variables were described using means and standard deviations. Fisher's exact test was used to assess the association between sociodemographic variables, lifestyle habits, and comorbidities with the risk of developing CKD (assessed using the SCORED questionnaire). The relationship between the age of the participants (in years) and the SCORED questionnaire score (0 to 3 points versus 4 or more points) was analyzed using the Mann-Whitney test.

Fisher's exact test was used to verify the association between sociodemographic variables, lifestyle habits, comorbidities, and responses to the question “Can your high blood pressure, without treatment and control, cause complications?” and the statement “High blood pressure, if left untreated, can cause kidney failure.” The association between the age of the participants and these same responses was also evaluated using the Mann-Whitney test. Furthermore, Fisher's exact test was applied to investigate the association between participants' responses and SCORED questionnaire scores. Finally, knowledge about the relationship between hypertension and CKD, as well as complications of hypertension before and after the educational intervention, was analyzed using the paired Wilcoxon test.

The study was submitted to and approved by the institution's Research Ethics Committee (REC), under Opinion No. 5,207,329, complying with all recommendations and ethical principles for research involving human subjects.

RESULTS

The final sample consisted of 63 participants. In terms of sociodemographic characteristics, most were female (77.8%), aged 70 years or older (41.3%), self-identified as brown (49.2%), had a steady partner (46%), and had completed high school (41.3%).

Regarding comorbidities and lifestyle habits, it was observed that the majority did not have dyslipidemia (52.4%), 93.7% were not obese, 71.4% had never smoked, and 81% did not consume alcoholic beverages. Regarding the time since diagnosis of hypertension, the group with 21 years or more since diagnosis predominated.

Analysis of the SCORED instrument revealed that 96.8% of participants were at risk for developing CKD.

When answering the question “Can your high blood pressure cause complications if left untreated and uncontrolled?”, only one participant (1.6%) answered “no”, with a total of 98.4% correct answers.

Regarding the statement “High blood pressure, if left untreated, can cause kidney failure,” 79.4% of participants answered correctly, as shown in Table 1. The average age of those who answered incorrectly or stated they did not know

was significantly higher (72.2 ± 9.3 years) compared to those who answered correctly (65.0 ± 9.7 years), with statistical significance (p=0.049).

Table 1 shows that, among participants who answered correctly, 98.0% were not obese, which is a statistically significant association (p=0.025). On the other hand, 23.1% of those who answered incorrectly or did not know were obese, a proportion higher than the 2.0% among those who answered correctly. Although no statistical significance was identified in relation to dyslipidemia, it was observed that 61.5% of those who answered "incorrect/don't know" had this condition.

Table 1 – Distribution of affirmative responses to the statement "High blood pressure, if left untreated, can cause kidney failure" according to sociodemographic data, comorbidities, lifestyle, and time since diagnosis of hypertension. Niterói, RJ, Brazil, 2024. (n=63)

	Total	High blood pressure, if left untreated, can cause kidney failure		P-value
		Incorrect/Don't know n=13(20,6%)	Correct n=50(79,4%)	
Sex				
Female	49 (77.8%)	10 (76.9%)	39 (78.0%)	1.000
Male	14 (22.2%)	3 (23.1%)	11 (22.0%)	
Age	66.4 ± 10.0	72.2 ± 9.3	65.0 ±9.7	0.049
< 50 years	2 (3.2%)	0 (0%)	2 (4.0%)	
50 to 59 years	14 (22.2%)	0 (0%)	14 (28.0%)	0.120
60 to 69 years	21 (33.3%)	6 (46.2%)	15 (30.0%)	
70 years or +	26 (41.3%)	7 (53.8%)	19 (38.0%)	
Self-reported skin color				
White	16 (25.4%)	6 (46.2%)	10 (20.0%)	
Brown	31 (49.2%)	4 (30.8%)	27 (54.0%)	0.140
Black	16 (25.4%)	3 (23.1%)	13 (26.0%)	
Marrital status				
With a steady partner	29 (46.0%)	6 (46.2%)	23 (46.0%)	
Without a steady partner	23 (36.5%)	3 (23.1%)	20 (40.0%)	0.290
Widowed	11 (17.5%)	4 (30.8%)	7 (14.0%)	
Education				
Incomplete elementary education	13 (20.6%)	4 (30.8%)	9 (18.0%)	
Complete elementary education / Incomplete secondary education	21 (33.3%)	1 (7.7%)	20 (40.0%)	0.099
Complete secondary education / Incomplete higher education	26 (41.3%)	7 (53.8%)	19 (38.0%)	
Complete higher education	3 (4.8%)	1 (7.7%)	2 (4.0%)	
Dyslipidemia				
No	33 (52.4%)	5 (38.5%)	28 (56.0%)	0.353
Yes	30 (47.6%)	8 (61.5%)	22 (44.0%)	
Obesity				
No	59 (93.7%)	10 (76.9%)	49 (98.0%)	0.025
Yes	4 (6.3%)	3 (23.1%)	1 (2.0%)	
Smoking				
Never	45 (71.4%)	8 (61.5%)	37 (74.0%)	0.541
Stopped more than 1 year ago	9 (14.3%)	2 (15.4%)	7 (14.0%)	
Yes	5 (7.9%)	2 (15.4%)	3 (6.0%)	
Not reported	4 (6.3%)	1 (7.7%)	3 (6.0%)	
Alcohol intake				
No	51 (81.0%)	11 (84.6%)	40 (80.0%)	1.000
Yes	12 (19.0%)	2 (15.4%)	10 (20.0%)	
HAS diagnosis time				
10 years or less	13 (20.6%)	4 (30.8%)	9 (18.0%)	0.563
11 to 20 years	24 (38.1%)	5 (38.5%)	19 (38.0%)	
21 years or more	26 (41.1%)	4 (30.8%)	22 (44.0%)	

Source: research data, 2024.

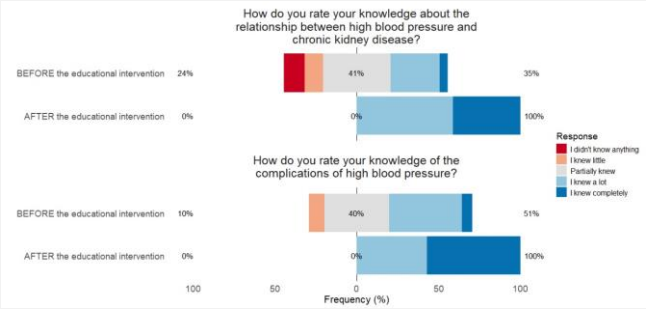
In the analysis of sociodemographic variables (gender, age, self-declared skin color, marital status, education), comorbidities (dyslipidemia, obesity), lifestyle habits (smoking and alcohol consumption), and time since diagnosis, regarding knowledge acquired or not acquired after the educational intervention, there was no significant association for the first question, "How do you assess your knowledge about the complications of high blood pressure before and after the educational intervention?" and the second question, "How do you assess your knowledge about the relationship between high blood pressure and CKD before and after the educational intervention?".

Considering the variables mentioned above, it was found that 92.1% of participants rated their knowledge as

"acquired" after the intervention.

Furthermore, regarding the responses to the Self-Assessment Form, Figure 1 shows that in response to the question "How would you rate your knowledge about the relationship between high blood pressure and CKD?", 24% of participants responded that they "knew nothing" or "knew little," 41% responded that they "knew partially," and 35% responded that they "knew a lot" or "knew completely" before the educational intervention. In contrast, 100% of participants responded that they "knew a lot" or "knew completely" after the educational intervention (p<0.001).

In Figure 1, it can be seen that, in relation to the question "How do you assess your knowledge about the complications of high blood pressure?", 10% of hypertensive patients answered "I knew little," 40% "I knew partially," and 51% "I knew a lot" or "I knew completely" before the educational intervention. On the other hand, 100% of participants marked "I knew quite a lot" or "I knew completely" after the educational intervention (p<0.001).



Source: research data, 2024.

Figure 1 – Distribution of responses to the Knowledge Self-Assessment Form. Niterói, RJ, Brazil, 2024. (n=63)

DISCUSSION

In the analysis of this study, focusing on resistant hypertensive patients, it was evident that all participants acquired knowledge after the educational intervention regarding the complications of SAH and its relationship with CKD. Before the intervention, 15 participants (24%) reported being unaware of this relationship, and 26 (41%) had partial knowledge.

Regarding the complications of SAH, it was observed that the majority of the sample (98.4%) demonstrated knowledge that the disease, when not treated and controlled properly, can lead to complications. A study conducted with hypertensive individuals at a health unit in a metropolitan region in the state of Paraná showed that, even after educational intervention, there was a reduction in the number of correct answers related to SAH complications on the Hypertension Knowledge-Level Scale (HK-LS), especially regarding the risk of kidney disease[13].

There is scientific evidence, in the use of the Brazilian version of the HK-LS, which identified that the level of education can influence knowledge about hypertension. Therefore, difficulties in understanding technical terms in the scale may be associated with the educational level of participants, suggesting a positive relationship between education and knowledge about the disease[20]. However, in the present study, the education variable did not show a statistically significant association with the scores obtained in the HK-LS.

Based on the application of specific statements from the HK-LS, it was possible to verify that most participants recognized the relationship between SAH and CKD. However, older individuals demonstrated less knowledge about this association. Corroborating these findings, a study conducted in Mexico identified a significant association between age and level of knowledge about hypertension (p=0.01)[21].

In this study, participants with obesity and dyslipidemia performed worse in responses related to the association between SAH and CKD. Although no specific studies were found on the level of knowledge of this population, it should be noted that obesity and dyslipidemia are strongly related to an increased risk of developing CKD due to the induction of systemic inflammation, insulin resistance, increased endothelial pressure, and intraglomerular dysfunction, contributing to progressive loss of renal function[22].

Regarding lifestyle habits, it was observed that most participants, regardless of their risk for CKD, reported not using tobacco or alcoholic beverages. The investigation of the association between lifestyle, glomerular filtration, and proteinuria highlighted that smoking is related to increased albuminuria, which is a marker of progressive kidney damage and high blood pressure. Additionally, there is also evidence that high alcohol consumption is associated with a higher prevalence of albuminuria and worsening renal function[23].

Scientific studies have shown significant differences between hypertensive men and women in terms of knowledge and perception of the risk of developing CKD. A study conducted in Palestine showed that male patients had higher scores in preventive practices related to CKD, associated with higher levels of knowledge and positive attitudes toward disease prevention. On the other hand, it was found that women with hypertension are less frequently diagnosed with CKD and are less likely to be referred to nephrology services, which may indicate an underestimation of risk or less awareness of the severity of the condition[24-25].

In addition, sociocultural factors, such as gender roles and occupational status, may influence the prevalence of CKD, affecting men and women differently. These disparities highlight the importance of educational and preventive strategies that consider gender specificities, aiming to improve knowledge about the risks of CKD among hypertensive individuals and promote more equitable and effective interventions[26].

There are differences in the level of knowledge about the risk of developing CKD among hypertensive individuals of different ethnicities. For example, self-declared black individuals tend to have less access to health services and a lower chance of early diagnosis, which can compromise their perception of the risks of CKD. In addition, this group has a higher prevalence of chronic conditions, such as high blood pressure, which increases vulnerability to the progression of CKD. Socioeconomic factors, such as lower education, income, and limited access to health information, contribute to these inequalities[23].

Findings in the literature indicate that marital status may influence how hypertensive individuals perceive and manage their risk of developing CKD. In a study conducted at a university hospital in Brazil, a higher proportion of hypertensive individuals with CKD were found to be living with a partner, although no statistically significant association was found between marital status and level of knowledge about the disease. These results suggest that, although the social support provided by a partner may promote adherence to treatment, other factors, such as access to infor-

mation and the relational context, seem to be more decisive in raising awareness about the risks of CKD[15,27].

Regarding the time of diagnosis of SAH, there is a risk of developing CKD. In the literature, it has been shown that prolonged duration of uncontrolled hypertension significantly increases cumulative kidney damage due to constant hemodynamic overload in the renal glomeruli. Over time, this high pressure promotes irreversible structural changes, such as glomerular sclerosis and reduced glomerular filtration, contributing to the progression of CKD[15].

In people with hypertension for more than 10 years, there is a higher prevalence of microalbuminuria, an early marker of kidney damage. This relationship is exacerbated by the presence of other risk factors, such as diabetes and obesity. However, the duration of exposure to high blood pressure is one of the main determinants of renal decline. In the present study, it was observed that the majority of the population at risk for CKD had been diagnosed with SAH for more than 21 years[1].

Furthermore, the relationship between the time of diagnosis of hypertension and the risk of progression to end-stage renal disease (ESRD) in individuals with more than 20 years of hypertension diagnosis showed a 1.8 times higher risk of disease progression compared to those with less than five years. This effect was more pronounced in patients who did not adhere to treatment or had significant variations in blood pressure over time. The study reinforces that the duration of exposure to hypertension plays a critical role in renal restriction, highlighting the importance of specific and sustained blood pressure control at all stages of hypertension[28].

Despite similar results, a study conducted at a health unit in Paraná pointed to a reduction in the number of correct answers on items of the HK-LS scale related to complications of SAH, even after educational intervention[20]. The literature highlights the role of health education in treatment adherence and the adoption of healthy habits, with significant clinical benefits[29].

Evidence shows that educational actions conducted by nurses, especially on an individualized basis, have a positive impact on controlling systolic and diastolic blood pressure, in addition to contributing to the prevention of comorbidities, hospitalizations, and deaths[12-30].

When based on active listening, dialogue, and the use of technology, they can significantly contribute to increasing patients' knowledge and awareness of the care needed to avoid renal complications. Such strategies are even more effective when developed using participatory methodologies, such as action research, which values local knowledge and encourages people to take the lead[31].

It should be noted that health literacy comprises, as an area of knowledge, "education" and the literacy process; and "health" focused on health promotion and disease prevention[32]. Nursing skills such as assertive communication, health education, promotion of treatment adherence, and safety are essential issues for "effective health literacy in health management"[21].

Among the limitations of the study, it was identified that the cross-sectional design, with an intentional, non-probabilistic sample, requires caution and does not allow for the generalization of results. Therefore, future studies with different research designs are suggested. In addition, researchers had difficulty contacting eligible participants by telephone due to unanswered calls, non-existent numbers, and changes in contact numbers.

CONCLUSION

The study showed that knowledge before and after the educational intervention, especially regarding issues related to the complications of hypertension and its association with the risk of developing kidney disease, had a high percentage of correct answers (79.4%) for the entire sample.

Thus, it can be concluded that the educational intervention was a potential strategy for strengthening the knowledge of hypertensive individuals about the renal risks resulting from SAH, standing out as a potential tool to support health education actions in the field of health.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

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All authors are responsible for drafting the manuscript, critically revising its intellectual content for the final published version, and ensuring the study's accuracy and integrity with regard to ethical, legal, and scientific aspects.