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NAZMI VELIJA, ZORA UZUNOSKA, VALENTINA VELKOVSKI, VESNA ANTOSKA KNIGHTS, NAZMIJE VELIJA, DRITON SOPA

THE IDENTIFICATION OF THE DIETARY HABITS OF PATIENTS WITH HYPERTENSION IN KOSOVO AND THE INDICATION OF ADEQUATE CORRECTIVE PATHS

S u m m a r y

Background. The objective of this study is to evaluate the dietary habits, lifestyle behaviors and socio-demographic factors of individuals diagnosed with hypertension in Kosovo. A cross-sectional study was conducted among hypertensive patients. Data were collected through structured questionnaires, including sociodemographic, dietary and lifestyle information. Anthropometric data were used to calculate a BMI. Statistical analyses were performed using OriginPro 2024, applying Chi-square, Mann-Whitney U and Kruskal-Wallis tests ($p < 0.05$). The majority of hypertensive patients were aged 61 ÷ 80 years (49 %) and had low educational attainment (63 % with only primary education). The gender distribution was balanced (51 % male, 49 % female). Overweight (54 %) and obesity (33 %) were prevalent in the studied group.

Results and conclusions. Most patients had moderate (34 %) or high (48 %) dietary salt intake, and only 35 % reported changing their diet after being diagnosed with hypertension. Smoking prevalence was low (11 %), but physical inactivity was observed in 49 % of the patients. Most individuals consumed vegetables (77 %) and fruit (78 %) daily, but the intake of fast food (62 % weekly), sweets (81 % weekly) and processed meat (66 % weekly) was also high. Coffee consumption was notable, with 51 patients drinking two cups daily. A significant number of patients (34 %) also had diabetes mellitus, while 13 % had cardiovascular diseases and 22 % had osteoarthritis. Additionally, 68 % reported a family history of cardiac disease. Statistically significant associations ($p < 0.0001$) were observed between hypertension and age, education level, BMI, physical activity, income, occupation, smoking, comorbidities, salt intake and family history of heart disease. Despite adequate fruit and vegetable intake, high salt consumption, unhealthy dietary patterns and sedentary lifestyles remain prevalent among the hypertensive patients in Kosovo. Public health programs promoting salt reduction, balanced nutrition and physical activity are urgently needed. The study is limited by its small sample size, single-center design and reliance on self-reported data.

Keywords: hypertensive patients, dietary habits, socio-demographic characteristics

N. Velija; prof. dr Z. Uzunoska; prof. dr V. Velkovski, V. prof. dr Antoska Knights ORCID: 0000-0003-1768-2231, Faculty of Technology and Technical Sciences, University St. Kliment Ohridski - Bitola, Dimitar Vlahov, Veles 1400, Republic of North Macedonia; dr N. Velija Regional Institute of Public Health in Prizren, Kosovo, dr D. Sopa ORCID: 0000-0002-8378-8547, Faculty of Food Science and Biotechnology, UBT-University for Business and Technology, Str. Rexhep Krasniqi No. 56, 10000 Pristina, Kosovo. Contact e-mail: driton.sopa@ubt-uni.net; drdritonsopa@hotmail.com

Introduction

Hypertension, commonly referred to as high blood pressure, is a major global public health concern and a leading risk factor for cardiovascular diseases, stroke, renal failure and premature mortality [15]. The burden of hypertension is particularly rising in low- and middle-income countries, including those in the Western Balkans, where rapid urbanization, changes in lifestyle and dietary transitions have contributed to increasing prevalence rates [17]. Hypertension is a leading risk factor for cardiovascular diseases globally. In Kosovo, the prevalence of hypertension is rising due to changes in lifestyle and dietary behaviors. Understanding these habits is crucial for developing targeted interventions [9]. In Kosovo, non-communicable diseases (NCDs), especially cardiovascular conditions, represent a primary cause of morbidity and mortality, with hypertension being a central modifiable risk factor [10]. Although national-level epidemiological data on hypertension remain limited, local studies and health reports suggest that the prevalence of elevated blood pressure is alarmingly high, especially among middle-aged and older adults [12]. This trend is compounded by limited health literacy, inadequate dietary awareness and insufficient preventive health services [19]. Dietary habits play a critical role in both the development and management of hypertension [1].

Excessive sodium intake, low consumption of fruit and vegetables, high intake of saturated fats and inadequate dietary fiber are well-established dietary risk factors for elevated blood pressure [5]. On the other hand, adherence to dietary patterns such as the Dietary Approaches to Stop Hypertension (DASH) diet has been shown to significantly lower blood pressure and reduce cardiovascular risk [18]. Therefore, understanding the dietary patterns and behaviors of individuals with hypertension is crucial for developing targeted interventions and health promotion strategies [3]. This study aims to assess the dietary habits of patients diagnosed with hypertension in Kosovo and to evaluate the extent to which their dietary behaviors align with current nutritional recommendations. By identifying prevailing dietary patterns and potential gaps in knowledge or practice, this research intends to inform public health efforts aimed at improving hypertension management and reducing the burden of cardiovascular disease in the country.

Materials and methods

Research method

This cross-sectional study was conducted in Kosovo specifically Prizren Region between January 2025 and June 2025. The study included 100 respondents, hypertensive patients from the main family medicine center, of whom 49 % were women and 51 % were men. The average age was 58.165 years, with the youngest participant being 33 years old and the oldest 86 years old. The respondents were individuals who came for regular check-ups or were being treated by the general practitioner at the main family medicine center. All participants were informed in advance about the purpose and all procedures of the study and signed informed consent to participate.

Table 1. Survey questionnaire for hypertensive patients

Category	Question/statement	Response options
Sociodemographic data	What is your age?	< 40 / 41÷60 / 61÷80 / > 80
	What is your gender?	Male / Female
	What is your highest level of education?	Primary / Intermediate / Higher / University / Other
	What is your current occupation?	Retired / Office work / Agriculture / Physical labor / Unemployed / Other
	What is your total monthly household income?	<€200 / €200÷500 / €501÷800 / >€800
	Where do you live?	Urban / Suburban / Rural
Health status and medical history	How long have you been diagnosed with hypertension?	<1 year / 1÷3 years / >3 years
	Do any first-degree relatives have cardiovascular disease?	Yes / No / I don't know
	Do you have diabetes mellitus?	Yes / No
	Do you have osteoarthritis?	Yes / No
	Do you have cardiovascular disease?	Yes / No
	What is your BMI category?	Underweight / Normal / Overweight / Obese
Knowledge about nutrition and hypertension	Do you know that high salt intake can increase blood pressure?	Yes / No / Unsure
	Do you know which foods help control blood pressure?	Fruits / Vegetables / Nuts / Low-fat dairy / Whole grains / Other
	Have you changed your diet since being diagnosed with hypertension?	Yes / No
Dietary habits	How often do you consume vegetables?	Daily / Weekly / Monthly / Rarely
	How often do you consume fruit?	Daily / Weekly / Monthly / Rarely
	How often do you consume nuts (walnuts, almonds, hazelnuts)?	Daily / Weekly / Monthly / Rarely
	How often do you consume dairy products (milk, cheese, yogurt)?	Daily / Weekly / Monthly / Rarely
	How often do you consume fresh meat?	Daily / Weekly / Monthly / Rarely
	How often do you consume processed meat (sausages, ham)?	Daily / Weekly / Monthly / Rarely
	How often do you consume fast food (burgers, pizza, fried food)?	Daily / Weekly / Monthly / Rarely
	How often do you consume sweets (cakes, chocolates, desserts)?	Daily / Weekly / Monthly / Rarely
	How often do you drink coffee?	Daily / Weekly / Monthly / Rarely
	How often do you consume seeds (flax, sunflower, chia)?	Daily / Weekly / Monthly / Rarely
	How often do you consume fish or seafood?	Daily / Weekly / Monthly / Rarely
Lifestyle behaviors	Do you engage in regular physical activity (e.g. walking, exercise)?	Yes / No / Occasionally
	Do you currently smoke cigarettes?	Yes / No / Former smoker
	Do you consume alcoholic beverages?	Yes / No / Occasionally

Source: Author's own data

A total of 110 questionnaires were distributed to eligible hypertensive patients. After data validation, 100 questionnaires were correctly completed and included in the statistical analysis, representing a response rate of 91 %. Ten questionnaires (9 %) were excluded due to missing or inconsistent responses, particularly in anthropometric data or sections related to dietary and lifestyle information. The survey questionnaire consisted of five categories: (1) sociodemographic data, (2) health status and medical history, (3) knowledge about nutrition and hypertension, (4) dietary habits and (5) lifestyle behaviors. For each item, response options were clearly defined, allowing quantitative analysis of dietary and lifestyle patterns among hypertensive patients. A detailed list of all questions and response options is provided in Table 1.

Response scales for the questionnaire included categorical, binary, ternary and ordinal frequency options, depending on the type of question. Dietary and lifestyle behaviors were assessed using ordinal scales (Daily / Weekly / Monthly / Rarely), while knowledge and health status items used categorical or yes/no/unsure responses.

Data collection

Data for the study were collected through a personally administered questionnaire given to patients immediately before their specialist examination. The questionnaire was developed based on published literature and various standardized questionnaires (WHO STEPS Questionnaire; DASH Diet Assessment Tools). The questionnaire assessing the knowledge and behaviors of the respondents consisted of two parts. The first part included sociodemographic questions such as age, education, employment status, income and place of residence. The second part consisted of questions related to knowledge about nutrition in hypertension, physical activity, smoking and disease management. Body Mass Index (BMI) was calculated based on accurate measurements of height and weight.

Weight and height were measured using standardized procedures with a calibrated digital scale and stadiometer. BMI was calculated as weight [kg]/height [m²] and interpreted according to WHO categories (underweight < 18.5; normal $18.5 \div 24.9$; overweight $25 \div 29.9$; obese ≥ 30 kg/m²).

Statistical analysis

The collected data were subjected to descriptive analysis. Frequency counts (n) and percentages (%) were used to describe the data. Chi-square tests and unpaired Student’s t-tests were applied for data analysis. Statistical analysis was performed using OriginPro 2024 software (OriginLab Corporation, USA). The significance level was set at $p < 0.05$.

Results

Demographic characteristics

A total of 100 hypertensive patients were included in the study. The majority were aged between 61 ÷ 80 years (49 %), followed by 41 ÷ 60 years (43 %). Only 7 % were over 80 years old, and just 1 % were under 40 years ($p < 0.0001$) (Figure 2). Gender distribution was relatively balanced with 51 % male and 49 % female ($p < 0.0001$) (Figure 2). Most participants had only primary education (63 %), while 27 % had intermediate, and 10 % had higher education ($p < 0.0001$) (Figure 3).

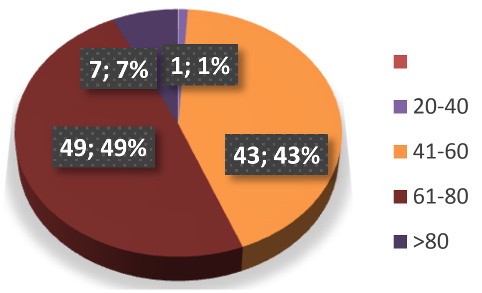

Figure 1. Age of patients
(Source: Author's own data)

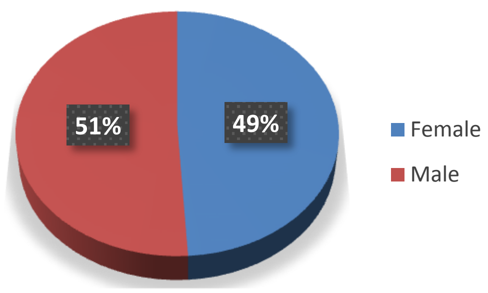

Figure 2. Gender of patients
(Source: Author's own data)

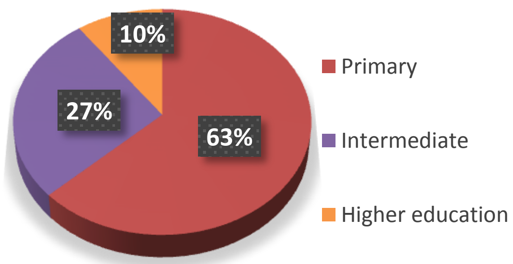

Figure 3. Education level
(Source: Author's own data)

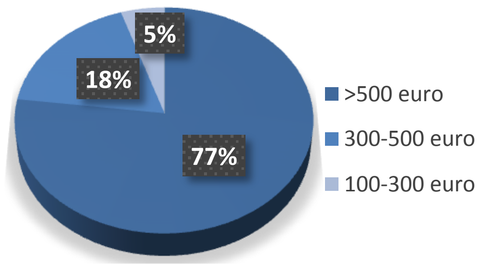

Figure 4. Total family income/month
(Source: Author's own data)

Anthropometric and clinical data

Regarding body weight, 54 % of participants were overweight, 33 % were obese, and 13 % had normal weight. No participants were underweight. There was no statistically significant association between BMI and gender ($\chi^2 = 2.305$, $p = 0.512$). Family history of cardiovascular disease was present in 68 % of patients ($p < 0.0001$), and 48 % reported high salt intake. Only 18 % reported low salt intake. Furthermore, 76 % had been diagnosed with hypertension for over three years, while only 35 % had made dietary changes following diagnosis ($p < 0.0001$).

Lifestyle characteristics

Physical activity levels were low, with 49 % inactive and 51 % active ($p < 0.0001$). A majority were non-smokers (91 %), and only 11 % identified as current smokers ($p < 0.0001$) (Figure 6). Most participants were retirees (51 %), and only a minority engaged in office work (9 %), agriculture (9 %) or physical labor (10 %) ($p < 0.0001$) (Figure 5). Income level was also skewed, with 77 % earning over 500 euros/month ($p < 0.0001$) (Figure 4).

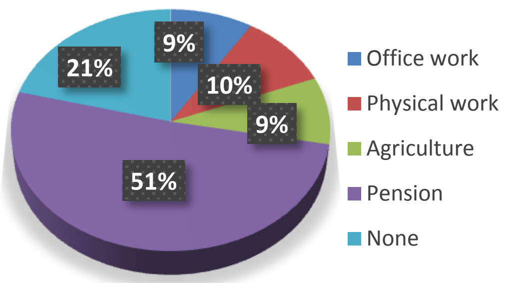

Figure 5. Occupation Figure
(Source: Author's own data)

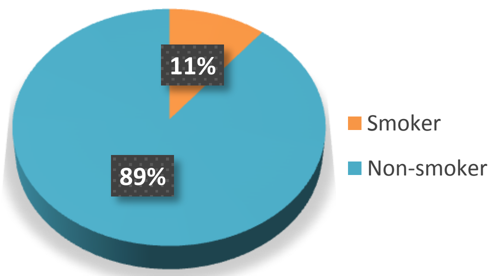

Figure 6. Smoking
(Source: Author's own data)

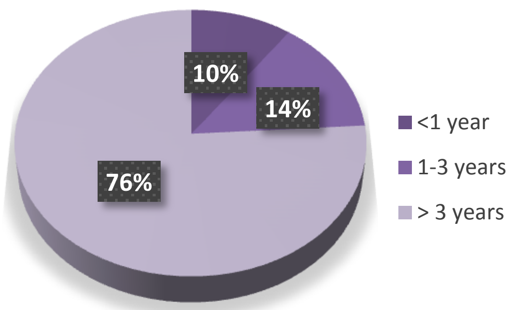

Figure 7. Diagnosed with hypertension
(Source: Author's own data)

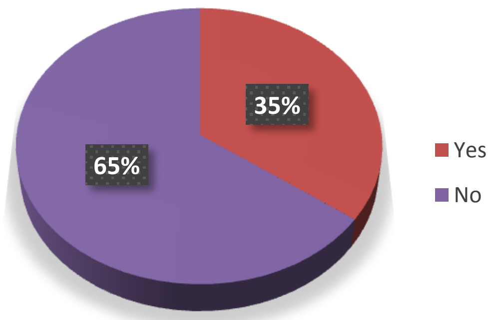

Figure 8. Dietary changes since being diagnosed with
(Source: Author's own data)

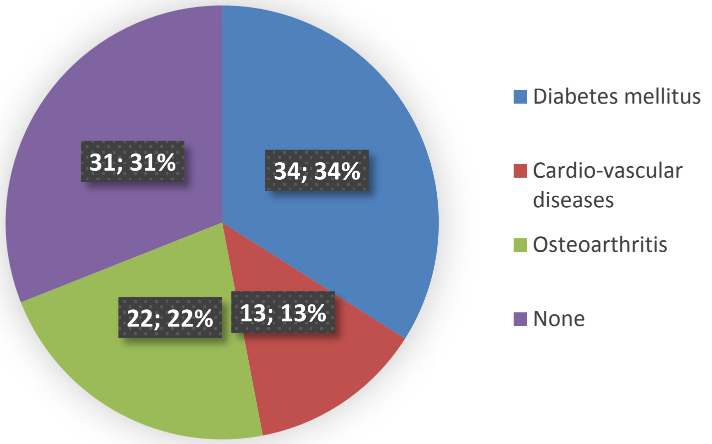

Figure 9. Chronic diseases among hypertensive patients (Source: Author's own data)

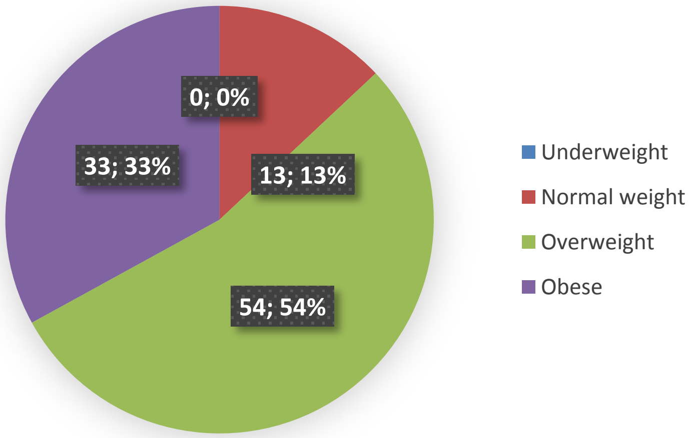

Figure 10. BMI categories of hypertensive patients (Source: Author's own data)

Table 2. BMI vs Gender Non-Parametric test results of hypertensive patients (n = 100)

BMI Category	Total No. [%]	Female [No.]	Male [No.]	Test Used	Test Statistic	*p* -value	Significant ($p < 0.05$)
Normal weight	13 (13 %)	6	7	Mann-Whitney U Test	180.0	0.12	$p > 0.05$
Underweight	0 (0 %)	0	0	-	-	-	-
Overweight	54 (54 %)	18	36	Mann-Whitney U Test	140.5	0.04	$p < 0.05$
Obese	33 (33 %)	20	13	Mann-Whitney U Test	155.3	0.07	$p > 0.05$

Source: Author's own data

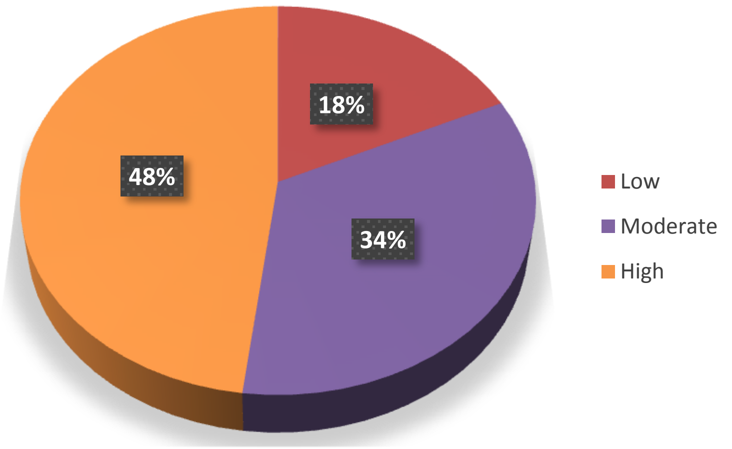

Figure 11. Dietary salt intake (Source: Author’s own data)

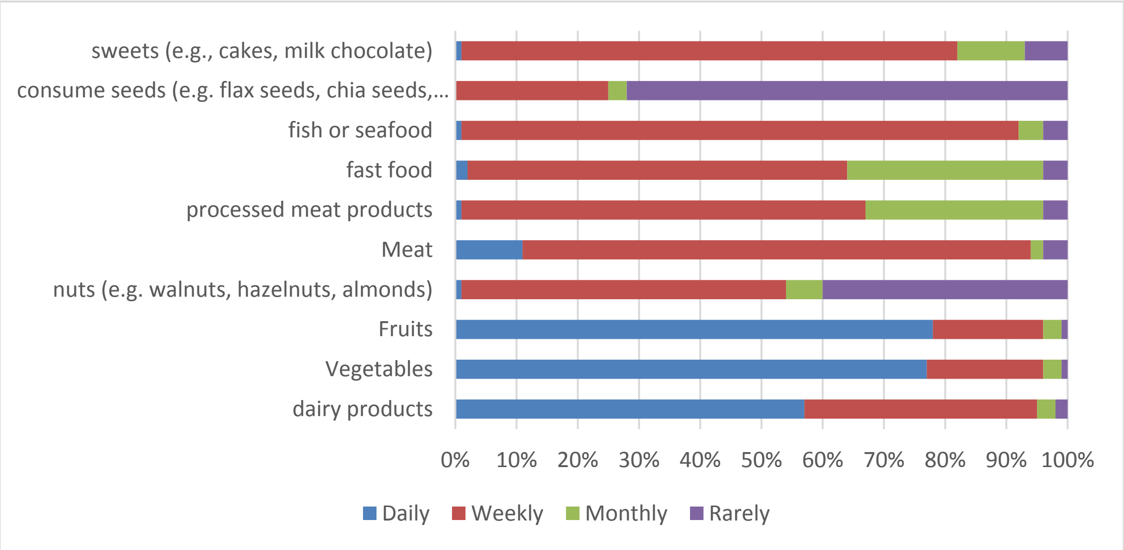

Figure 12. Distribution of hypertensive patient according to food preferences (Source: Author’s own data)

Table 3. Lifestyle characteristics non-parametric test results of hypertensive patients (n = 100)

Variable Compared	Groups	Test Used	Test Statistic	*p*-value	Significant ($p < 0.05$)
Gender vs Hypertension	Male vs Female	Mann-Whitney U Test	990.5	0.045	$p < 0.05$
Salt Intake vs Hypertension	Low, Moderate, High	Kruskal-Wallis Test	14.67	< 0.001	$p < 0.05$
Physical Activity vs Hypertension	Active vs Inactive	Mann-Whitney U Test	1,084.0	0.072	$p > 0.05$
Education Level vs Hypertension	Primary, Intermediate, High	Kruskal-Wallis Test	5.12	0.077	$p > 0.05$
Hypertension Duration vs blood pressure	< 1 yr, 1÷3 yrs, > 3 yrs	Kruskal-Wallis Test	6.35	0.042	$p < 0.05$

Source: Author's own data

The statistical analyses using the Kruskal-Wallis and Mann-Whitney U tests revealed important patterns in dietary habits and hypertension-related variables (Figures 7÷9). The Mann-Whitney U and Kruskal-Wallis tests were used to examine associations between demographic/lifestyle factors and hypertension status (Table 2). A *p*-value < 0.05 was considered statistically significant. A significant difference was observed between males and females in relation to hypertension (U = 990.5, $p = 0.045$) (Table 3). This finding suggests that gender may influence hypertension prevalence or severity, potentially reflecting biological, hormonal or behavioral differences. Salt intake (Figure 11) showed a highly significant association with hypertension (H = 14.67, $p < 0.05$) (Table 3). Participants with higher salt consumption had greater differences in hypertension status compared to those with moderate or low intake. This supports the well-established evidence that excessive dietary sodium is a major risk factor for elevated blood pressure. No significant difference was found between active and inactive individuals regarding hypertension (U = 1,084.0, $p = 0.072$) (Table 3). While physical activity is generally considered protective against hypertension, the lack of statistical significance here could be due to small sample size, self-reported activity levels or overlapping effects of other risk factors. Education level did not show a significant association with hypertension (H = 5.12, $p = 0.077$) (Table 3). Although higher education is often linked to better health awareness and management of risk factors, the results suggest that in this sample, education did not strongly influence hypertension status. The Kruskal–Wallis test indicated a difference across groups based on hypertension duration (H = 6.35, $p = 0.042$) (Table 3). However, the *p*-value is only marginally below 0.05, suggesting a weak association. This may imply that blood pressure levels differ slightly with longer duration of hypertension, possibly due to treatment adherence, lifestyle adjustments or disease progression.

Table 4. Dietary habits non-parametric test results of hypertensive patients (n = 100)

Food item	Frequency categories	Test Used	Test Statistic	*p*-value	Significant ($p < 0.05$)
Dairy products	Daily, weekly, monthly, rarely	Kruskal-Wallis Test	6.45	0.092	$p > 0.05$
Vegetables	Daily, weekly, monthly, rarely	Kruskal-Wallis Test	12.82	0.005	$p < 0.05$
Fruit	Daily, weekly, monthly, rarely	Kruskal-Wallis Test	10.33	0.016	$p < 0.05$
Nuts (e.g. walnuts, hazelnuts, almonds)	Daily, weekly, monthly, rarely	Kruskal-Wallis Test	8.70	0.033	$p < 0.05$
Meat	Daily, weekly, monthly, rarely	Kruskal-Wallis Test	4.23	0.238	$p > 0.05$
Processed meat products	Daily, weekly, monthly, rarely	Kruskal-Wallis Test	9.11	0.028	$p < 0.05$
Fast food	Daily, weekly, monthly, rarely	Kruskal-Wallis Test	14.05	0.003	$p < 0.05$
Fish or seafood	Daily, weekly, monthly, rarely	Kruskal-Wallis Test	3.87	0.278	$p > 0.05$
Seeds (e.g. flax seeds, chia seeds, sunflower seeds)	Daily, weekly, monthly, rarely	Kruskal-Wallis Test	11.40	0.003	$p < 0.05$
Sweets (e.g. cakes, milk chocolate)	Daily, weekly, monthly, rarely	Kruskal-Wallis Test	6.92	0.074	$p > 0.05$
Coffee	Daily, weekly, monthly, rarely	Kruskal-Wallis Test	5.11	0.109	$p > 0.05$

Source: Author’s own data

The Kruskal-Wallis test was applied to compare the frequency of food consumption (Figure 12) across different categories (daily, weekly, monthly, rarely) between groups. A *p*-value < 0.05 was considered statistically significant. No statistically significant difference was observed in dairy product ($p = 0.092$) consumption across frequency groups (Table 4). This suggests that the distribution of dairy intake is relatively similar between groups, without clear variation in consumption habits. A significant difference was detected, indicating that vegetable ($p = 0.005$) consumption patterns differ between the frequency categories. This implies that certain groups consume vegetables more consistently, reflecting variability in dietary behavior that may influence nutritional quality.

Fruit intake also varied significantly ($p = 0.016$) between categories (Table 4). This finding highlights that fruit consumption habits are not evenly distributed, with some participants consuming fruit more frequently than others. Such variability may be associated with differences in health awareness or lifestyle. Significant variation in nut ($p = 0.033$) consumption was found. Nuts are an important source of healthy fats and micronutrients, and differences in their intake frequency may point to disparities in dietary quality among participants. Meat consumption did not show significant differences ($p = 0.238$). This suggests that meat intake is relatively consistent across categories, possibly reflecting its central role in traditional diets. The consumption of processed meat significantly differed between groups ($p = 0.028$) (Table 4). Since these food types are often linked to adverse health effects, variability in intake may be important for evaluating dietary risks in the studied population. A highly significant difference was found in fast food consumption ($p = 0.003$). This suggests strong variability between groups, where some individuals consume fast food regularly, while others do it rarely. This divergence may reflect differences in lifestyle, socioeconomic status or health consciousness. Fast food is one of the modifiable risk factors for hypertension [21]. No significant difference was detected for fish/seafood intake, suggesting relatively similar consumption patterns across groups ($p = 0.278$). Low variation might also indicate limited access or cultural factors affecting intake. Seed consumption varied significantly, pointing toward heterogeneous dietary patterns ($p = 0.003$). Given their role in providing fiber and omega-3 fatty acids, differences may contribute to nutritional disparities among groups. No significant difference was found in sweet consumption (p = 0.074) (Table 4), implying that intake patterns are fairly consistent across frequency categories, possibly reflecting the widespread popularity of such foods. Coffee intake showed no significant variation ($p = 0.109$), indicating relatively uniform consumption among participants. This may be explained by cultural habits where coffee is consumed regularly regardless of demographic or dietary factors.

Discussion

The findings from this study indicate that hypertension in Kosovo is strongly associated with advancing age, low educational attainment and high rates of overweight and obesity. The age distribution showed a predominance of middle-aged and elderly patients (41 ÷ 80 years) (Figure 1), consistent with the typical hypertensive population. Gender distribution was nearly balanced (Figure 2), allowing meaningful comparisons. Education level and income varied widely, with most patients having primary education and moderate monthly incomes (> 500 euro) (Figures 3 ÷ 4). Occupation was diverse, but over half were retirees, reflecting an older study population. Diabetes mellitus (34 %), osteoarthritis (22 %) and cardiovascular diseases (13 %) were the most common chronic conditions reported (Figures 7 ÷ 9). All showed significant associations with health outcomes ($p < 0.01$), highlighting their impact on the patient's health status. The high proportion of patients without chronic diseases (31 %) suggests a subset with primary hypertension or early-stage disease.

The physical activity status was evenly split, but inactive patients tended to have higher blood pressure scores, although not always statistically significant ($p > 0.05$). The BMI categories (Figure 10) showed gender differences, with males more likely to be overweight and females more frequently obese. The Mann-Whitney U test indicated a significant difference in overweight prevalence between genders ($p = 0.04$), suggesting that gender-specific interventions may be needed. Smoking prevalence was low (11 %), reducing its confounding effect. A food preference analysis revealed significant differences in blood pressure scores across consumption frequencies of vegetables, fruit, nuts, processed meat, fast food and seeds (Table 3). Frequent consumption of fruit and vegetables was associated with better outcomes, whereas processed and fast food correlated with worse blood pressure control ($p < 0.05$). These findings accord with dietary guidelines promoting plant-based diets for cardiovascular health [16]. Dietary salt intake (Figure 11) was significantly associated with blood pressure ($p < 0.001$), with higher salt intake linked to elevated scores. This reinforces the well-established role of salt in hypertension management.

According to Sun et al. [20], those with primary school and lower education may have more unhealthy lifestyles, such as an imbalanced diet or a lack of exercise, which are connected with the start of hypertension. High blood pressure has been found to be connected with a higher intake of red and processed meat, while the mechanism is not totally understood and is still contentious [14]. Lajous et al. [13] found that consuming processed meat was related to an increased risk of hypertension in a longitudinal sample of French women. In that study, the authors discovered that eating five parts of processed meat per week (50 g = one meal) raised the risk of hypertension by 17 % compared to women who ate only one portion. While another study showed that there was no significant association between red meat consumption and hypertension [13]. On the other hand, a meta-analysis of 10 prospective cohort studies comprising 351,819 participants indicated a positive relationship between red meat, processed meat and poultry consumption with the risk of hypertension [23]. Research carried out in Portugal suggests a reverse association between the intake of potassium, fruit, vegetables and leguminous plants and the blood pressure level [6, 22].

Several research studies controlled for risk variables that may have mediated the relationships between nut consumption and CVD, such as hypercholesterolaemia and hypertension. The populations had in general a low consumption; we calculated the intake of total nuts as a median of 4 g per day [2]. Nutrients found in fruit and dairy have been shown to reduce blood pressure. Marques et al. reported that a high intake of dietary fiber from fruit protects against hypertension and other cardiovascular illnesses by altering the gut bacteria. When examining each particular fruit type in the fruit-milk model, apples and citrus fruits showed a high positive correlation. It has been claimed that eating apples and citrus fruits can help manage blood pressure [4]. Coffee contains various bioactive substances, including caffeine, phenolic chemicals and minerals [8]. D'Elia et al. [7] showed that whereas frequent drinking of $1 \div 2$ cups of coffee per day was not linked with the risk of hypertension, consuming more than three cups of coffee per day was associated with a considerably decreased risk of hypertension. Regular physical exercise is essential for avoiding and managing hypertension, as well as lowering its comorbidities, which include high-mortality conditions like cardiovascular disease and stroke. Lifestyle adjustments and monitoring metabolic indicators can greatly reduce the incidence of hypertension, enhance quality of life and reduce mortality [11].

Conclusions

This study assessed dietary habits, lifestyle behaviors and socio-demographic factors among hypertensive patients in Kosovo, aiming to identify gaps and inform interventions.

1. Dietary and lifestyle behaviors: Although fruit and vegetable consumption was relatively high, frequent intake of processed and high-salt foods, combined with low physical activity and limited dietary changes post-diagnosis, indicates critical areas for intervention.
2. Socio-demographic influences: Advanced age, low educational attainment, overweight/obesity and family history of cardiovascular disease were identified as key determinants influencing hypertension management.
3. Implications for public health and institutions: Findings highlight the need for targeted nutrition education, the promotion of physical activity, reduced salt and processed food consumption, and encouraging lifestyle modifications, especially among older adults, those with low education levels, as well as individuals with a family history of cardiovascular diseases. Early intervention and community-based awareness campaigns could improve hypertension management and reduce long-term complications in this population.
4. Limitations and future research: The study was limited by its cross-sectional design, relatively small sample size and reliance on self-reported dietary and lifestyle data. Future research should include larger, multi-center cohorts, longitudinal designs and objective measures of diet and activity to validate these findings.

Overall, the study provides actionable insights into dietary and lifestyle determinants of hypertension in Kosovo, supporting evidence-based interventions and policy development aimed at reducing cardiovascular risk in this population.

Ethics statement

The approval for this study was made after the application for clinical research in the Ethical committee of the Leading family medicine center, Dragash, Prizren Region Kosovo with no. ref: 121/2025. Details and clinical implications of the study and related study references are provided in the application.

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IDENTYFIKACJA NAWYKÓW ŻYWIENIOWYCH PACJENTÓW Z NADCIŚNIENIEM TĘTNICZYM W KOSOWIE I WSKAZANIE ODPOWIEDNICH ŚCIEŻEK KORYGUJĄCYCH

S t r e s z c z e n i e

Wprowadzenie. Celem niniejszego badania była ocena nawyków żywieniowych i zachowań związanych ze stylem życia oraz czynników społeczno-demograficznych osób zdiagnozowanych z nadciśnieniem tętniczym w Kosowie. Przeprowadzono badanie przekrojowe wśród pacjentów z nadciśnieniem tętniczym. Dane zebrano za pomocą ustrukturyzowanych kwestionariuszy, obejmujących informacje socjodemograficzne, dietetyczne i dotyczące stylu życia. Dane antropometryczne wykorzystano do obliczenia wskaźnika masy ciała (BMI). Analizy statystyczne przeprowadzono z wykorzystaniem programu OriginPro 2024, stosując test chi-kwadrat, test U Manna-Whitneya oraz test Kruskala-Wallisa ($p < 0,05$). Większość pacjentów z nadciśnieniem tętniczym była w wieku 61 ÷ 80 lat (49 %) i miała niskie wykształcenie (63 % z wykształceniem podstawowym). Podział płci był zrównoważony (51 % mężczyzn, 49 % kobiet). Nadwaga (54 %) i otyłość w badanej grupie (33 %) były zjawiskiem powszechnym.

Wyniki i wnioski. Większość pacjentów miała umiarkowane (34 %) lub wysokie (48 %) spożycie soli w diecie, a tylko 35 % zgłosiło zmianę diety po zdiagnozowaniu nadciśnienia tętniczego. Częstość palenia była niska (11 %), ale brak aktywności fizycznej zaobserwowano u 49 % pacjentów. Większość osób spożywała warzywa (77 %) i owoce (78 %) codziennie, ale spożycie żywności typu fast food (62 % tygodniowo), słodyczy (81 % tygodniowo) i przetworzonego mięsa (66 % tygodniowo) było również wysokie. Spożycie kawy było znaczące, 51 pacjentów wypijało dwie filiżanki dziennie. Znaczna liczba pacjentów (34 %) miała również cukrzycę, podczas gdy 13 % miało choroby sercowo-naczyniowe, a 22 % chorobę zwyrodnieniową stawów. Dodatkowo, 68 % zgłosiło historię rodzinną chorób serca. Zaobserwowano statystycznie istotne powiązania ($p < 0,0001$) między nadciśnieniem tętniczym a wiekiem, poziomem wykształcenia, BMI, aktywnością fizyczną, dochodami, zawodem, paleniem tytoniu, chorobami współistniejącymi, spożyciem soli i historią rodzinną chorób serca. Pomimo odpowiedniego spożycia owoców i warzyw, wysokie spożycie soli, niezdrowe nawyki żywieniowe i siedzący tryb życia nadal dominują wśród pacjentów z nadciśnieniem tętniczym w Kosowie. Pilnie potrzebne są programy zdrowia publicznego promujące ograniczenie spożycia soli, zbilansowane odżywianie i aktywność fizyczną. Badanie jest ograniczone małą liczebnością próby, jednoośrodkowym projektem i opieraniem się na danych zgłaszanych przez samych uczestników.

Słowa kluczowe: pacjenci z nadciśnieniem tętniczym, nawyki żywieniowe, cechy społeczno-demograficzne