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Tuwilika P.T. Keendhele; Mondjila Amkongo; Frank Mojiminiyi; Johanna Namene; Zibusiso Mkandla ...

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Knowledge, attitudes, and practices on hypertension among the health science faculty and students at the University of Namibia

A cross-sectional study

Tuwilika, P.T. Keendjele, MSc[a,*], Mondjila Amkongo, MSc[b], Frank Mojiminiyi, PhD[a], Johanna Namene, MSc[a], Katrina Niiteta, MSc[a], Ottilie, K.H. Katali, MSc[a], Tunelago, E. Nashihanga, BSc[a], Josefina Nelongo, MSc[a], Moneni, L. Shilumba, MSc[b], Zibusiso Mkandla, PhD[a,c]

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Abstract

Hypertension is a serious health concern, especially in developing countries, and assessing people's knowledge, attitudes, and practices (KAP) is important for its awareness and management. This cross-sectional study aimed to assess the KAP on hypertension among students and staff from the Health Sciences and Veterinary Medicine Faculty of the University of Namibia. A cross-sectional study design was conducted on adult participants who completed the KAP questionnaire while resting, and thereafter their blood pressure (BP) was measured. This study was conducted in September 2023. The sample comprised 99 participants (77 females and 22 males) aged 18 to 64 years. The majority (94%) of the participants had normal BP (≥140/90 mm Hg). The systolic BP of females (113.13 ± 13.70 mm Hg) was significantly lower ($P = .011$) than that of males (121.64 ± 13 mm Hg); however, there was no significant difference in diastolic BP between the 2 genders (73.58 ± 9.37 for females and 75.95 ± 10.55 for males; $P = .311$). Approximately 85% of the participants demonstrated a good understanding of the risk factors associated with hypertension. About 91% of the participants believed that hypertension is a serious health problem and were willing to change their daily routine to better manage their hypertension. Only approximately 39% of the participants regularly monitored their BP. Just above 50% of the participants regularly engaged in physical activities and made dietary modifications to maintain a healthy heart. It is important to host regular hypertension campaigns among health science personnel, as this would help refresh and improve their KAP in prevention and management.

Abbreviations: BP = blood pressure, KAP = knowledge attitude and practices.

Keywords: attitudes, hypertension, Knowledge, Namibia, practices

1. Introduction

Hypertension (blood pressure [BP] of ≥ 140/90 mm Hg or use of hypertensive medications) affects approximately 1.3 billion adults globally, mostly from low- and middle-income countries.[1] In Namibia, the prevalence of hypertension is 46.0% among adults aged 35 to 64 years.[2] Risk factors include genetics, environmental exposures, overweight and obesity, alcohol and drug consumption, physical inactivity, and poor-quality diet high in sodium and low in potassium.[1]

Awareness and self-care are essential for hypertension management.[3] Nonpharmacological interventions such as lifestyle changes can effectively manage hypertension.[4,5] Raising awareness of these interventions can improve community outcomes without access to pharmacological interventions.[6] However, rural communities often consider lifestyle changes ineffective and have low uptake of screening and medication.[7]

Elevated BP in youth predicts hypertension in adulthood.[8,9] Young adults, especially students, generally have good knowledge of hypertension risk factors, but awareness in developing countries, such as Namibia, still needs to improve.[10] Adults have better knowledge and awareness of hypertension treatment and control.[6] Poor health-seeking behavior among young

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The datasets generated during and/or analyzed during the current study are available from the corresponding author on reasonable request.

ChatGPT and Grammarly were used to enhance the language and condense the paragraphs. The final manuscript was manually reviewed by the authors.

[a] Department of Human, Biological & Translational Medical Sciences, Faculty of Health Sciences and Veterinary Medicine, University of Namibia, [b] Department of Radiography, School of Allied Health Sciences, University of Namibia, Windhoek, Namibia, [c] School of Physiology, Faculty of Health Sciences, University of the Witwatersrand.

** Correspondence: Tuwilika Keendjele, Department of Human, Biological & Translational Medical Sciences, School of Medicine, Faculty of Health Sciences and Veterinary Medicine, University of Namibia, 13301, Namibia (tkeendjele@unam.na).*

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men contributes to low prevalence awareness, whereas young women are more likely to have their BP checked during routine gynecological visits.[6]

Studies in Nigeria and Ethiopia have shown low knowledge of hypertension, negative attitudes towards treatment, and inadequate lifestyle practices.[3,11] In Mongolia, 17% of the population had never heard of the term "BP,"[7] whereas 65% of hypertensive individuals in a Nigerian study were unaware of their condition.[12]

Improving hypertension awareness at a younger age could enhance BP control and health-seeking behavior, especially in young men.[6] Females are more likely to have knowledge of associations between weight, exercise, and hypertension, possibly because of their roles as carers and higher education levels in some populations,[7] although another study showed that males are more literate than females.[5]

Modifiable risk factors for hypertension are well-known in most populations.[6,7,10,11] However, some groups have little knowledge of nonmodifiable risk factors such as male sex, older age, and family history of cardiovascular disease.[10] Despite high knowledge of hypertension risk factors and mitigating factors, many individuals remain unscreened and undiagnosed.[7,13]

Given the importance of understanding hypertension knowledge, attitudes, and practices (KAP) among different populations, this study assessed these factors among students and staff from the Health Sciences and Veterinary Medicine Faculty of the University of Namibia. This study aims to contribute to a broader understanding of hypertension awareness and management in Namibia and other developing countries.

2. Methods

2.1. Study design

This cross-sectional study assessed the KAP of BP among staff and students.

2.2. Study setting

This study was conducted at the University of Namibia, Hage Geingob Campus, in September 2023, after ethical approval. Physiological measurements were taken in Skills lab patient rooms, while participants completed questionnaires in a classroom.

2.3. Population and sampling

Adult participants (staff, supporting staff, and students) aged 18 years and older from the Hage Geingob Campus were included. Convenient sampling was used, with participants comprising willing and consenting faculty members available during the data collection period.

2.4. Sample size

The sample size was based on a previous hypertension prevalence study in Namibia 2. This study aimed to profile BP and its related factors among staff and students. With a reported 46% hypertension prevalence in Namibia 2 and a total campus population of approximately 1030, the sample size was calculated using the formula: $n = z^2 * p*(1-p)/e2$. For a 95% confidence level, z = 1.96, $P = .46$, and e = 0.0929. The calculated sample size was calculated to be 100 individuals.

2.5. Data collection procedure

2.5.1. Questionnaire. The participants completed a structured questionnaire with statements pertaining to their respective sections, such as KAP. The questionnaire was administered in English, however, the study researchers were present to assist and translate where needed. The questionnaire had 2 main sections: the demographic and lifestyle section and the knowledge, attitude, and practices section. The participants had to assess their KAPs on hypertension using a 4-point Likert scale (1: strongly agree, 2: agree, 3: disagree, and 4: strongly disagree).

2.5.2. Blood pressure measurements. Two medical doctors and a registered nurse measured the BP and heart rate using a Rossmax digital BP monitor (model: CH155f, Heerbrugg, Switzerland). The monitor was precalibrated by the manufacturer and validated by onsite doctors according to the European Society of Hypertension protocol.[14] Participants were seated upright with arm support at heart level and rested for 5 minutes before measurement. Systolic and diastolic BP and heart rate were automatically measured from the left arm, following the procedure described by Beevers et al.[15]

2.6. Data analysis

The survey was analyzed according to question type. The study measured the KAP of the participants as dependent variables. The independent variables included demographic data such as age, sex, marital status, highest qualification, and occupation, as well as lifestyle characteristics such as alcohol consumption, smoking status, physical activity level, and diet. Additionally, family history of hypertension and BP values were also considered as independent variables.

The total KAP scores were used to rank knowledge, attitudes, and practice levels. Statistical significance was assessed using independent sample *t* tests. The data was cleaned in Microsoft Excel and all analysis was done in Statistical Package for the Social Sciences version 29.

Knowledge, attitudes, and practices precision levels were determined by calculating the weighted averages and comparing the individual averages with the weighted average.

Data were cleaned using Microsoft Excel and analyzed for missing data, which were excluded. Frequency and percentages were used to describe demographic characteristics. Chi-square or Fisher's exact tests were used to determine the statistical significance between variables. The significance level for all statistical analyses was set at $P < .05$.

3. Research ethics

Ethical approval was obtained from the School of Medicine—Decentralised Ethics Committee (SOM13/2023) and the Ministry of Health and Social Services Ethics Committee (Ref: 22/3/1/2).

Informed written consent was obtained from all participants before the interviews and BP measurements, with the right to withdraw at any time without any consequences. The study welcomed all the staff and students, to ensure fairness. The data were anonymized using unique identifiers to maintain privacy and confidentiality, stored securely with password protection, and accessible only to the research team. The measurements were conducted in private patient rooms equipped with examination beds to ensure participant comfort and confidentiality.

4. Results

Table 1 presents the demographic characteristics of the participants. In this study, 103 participants were initially recruited, but 4 were excluded due to incomplete data. The remaining 99 participants were mostly between 18 and 39 years old (84.8%). The majority of participants were female (77.8%) and single (88.9%). Regarding education, 74.7% had completed high school, and 60.6% of the participants were university students.

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Other occupations included unemployment (2%), security guards (3%), cleaners (9.1%), administrators (5.1%), laboratory technicians (4%), lecturers (4%), managers (4%), research assistants (2%), and technologists (2%).

The lifestyle behaviors in this study are summarized in Table 2. The main findings indicated that 58.6% of the participants reported consuming alcohol at varying frequencies. Additionally, only 4 participants were admitted to smoking, and among them, 75% smoked one or more cigarettes daily. Most participants (56.6%) reported engaging in physical activity. A total of 71.7% used discretionary salt and spices, while 70.7% reported consuming fruits. A total of 77.8% of participants reported using vegetable oil as their primary cooking oil.

In the study, 58 individuals (59%) had a family history of hypertension, while 40 (40%) did not, and 1 individual (1%) had an unknown family history status (Table 3). Additionally, 33 participants (34%) reported a family history of known hypertension complications, whereas 62 (63%) did not (Table 3). Female participants had a lower systolic BP (113.13 ± 13.70 mm Hg) than males (121.64 ± 13 mm Hg; $P = .011$). There was no significant difference in diastolic BP between the 2 sexes (73.58 ± 9.37 for females and 75.95 ± 10.55 for males; $P = .311$, Table 3).

Table 4 highlights the participants' knowledge of hypertension and its treatment. Most of the participants understood the risk factors associated with hypertension. A significant majority (84.8%) felt confident about their knowledge of these factors, with 40.4% strongly agreeing and 44.4% agreeing. Regarding complications caused by hypertension, 70.8% showed awareness, with 35.4% strongly agreeing and another 35.4% agreeing. A majority (77.8%; 46.5% strongly agree and 31.3% agree) of the participants agreed that maintaining self-care practices is vital as they acknowledge the importance of being aware of lifestyle adjustments necessary for managing hypertension. Interestingly, over half (51.5%) indicated that they understood how stress can impact hypertension and recognized the significance of BP monitoring in managing the condition. However, in terms of familiarity with the treatment options, only a minority (22.2%) strongly agreed, while a higher percentage (32.3%) simply agreed. Overall responses on treatment specifics were mixed, while there was agreement at 54.5%, a proportion (45.55%) either disagreed or strongly disagreed on this matter, indicating room for improvement in educating individuals about treatment options.

Participants' perceptions of knowledge were determined by comparing the individual means with the weighted mean. The participants reported higher perceptions than lower perceptions regarding their knowledge of hypertension (Table 4).

Participants' attitudes are assessed in Table 5. Most respondents (90.9%) believed that hypertension is a serious health problem. Similarly, 91.9% (51.5% strongly agree and 40.4% agree) were willing to change their daily routine to better manage their hypertension. Hypertension education is important for health promotion, as agreed to by 90.9% of the respondents (77.8% strongly agreed, 13.1% agreed). Moreover, 88.9% (50.5% strongly agreed, 38.4% agreed) said they are committed to maintaining their BP under control and monitoring it regularly. Most participants (91.9%) believed that managing hypertension required both personal effort and healthcare support. Finally, 86.9% (69.7% strongly agree, 17.2% agree) recognized that managing hypertension requires long-term dedication and commitment.

On assessing practices (Table 5), only 39.4% regularly monitored their BP, indicating a need for increased awareness and practice of regular monitoring. Over half of the participants (56.6%) regularly engaged in physical activity to manage hypertension. Approximately 54.6% made dietary modifications, such as reducing sodium intake, to help control BP. Nearly half (45%) followed personalized management plans, showing a moderate level of adoption of tailored treatment strategies. Nearly one-third (30.4%) of the participants reported having regular checkups with healthcare providers, suggesting low commitment in continuous professional monitoring. A substantial percentage (77.8%) avoided smoking and had limited alcohol consumption, indicating a strong commitment to these lifestyle changes. Approximately two-thirds (75%) of the participants actively worked to reduce stress as part of their management

Table 1

Demographics and descriptive characteristics

Variable	Characteristic	N (%)	Mean ± SD
Sex	Male	22 (22.2)	-
	Female	77 (77.8)	
Age	18–39	84 (84.8)	27.8 ± 11.1
	40–59	12 (12.1)	
	≥60	3 (3)	
Marital status	Divorced	1 (1)	-
	Single	88 (88.9)	
	Married	8 (8.1)	
	Cohabitating	2 (2)	
Highest qualification	None	2 (2)	-
	High school	74 (74.7)	
	Diploma	3 (3)	
	Bachelor's degree	4 (4)	
	Honours degree	7 (7.1)	
	Master's degree	5 (5.1)	
	PhD	3 (3)	
Occupation	Unemployed	2 (2)	-
	Security guard	3 (3)	
	Cleaner	9 (9.1)	
	Administrator	5 (5.1)	
	Laboratory technician	4 (4)	
	Lecturer	4 (4)	
	Associate professor	1 (1)	
	Manager	4 (4)	
	Research assistant	2 (2)	
	Technologist	2 (2)	
	Student	60 (60.6)	

Data presented as mean ± standard deviation.

Table 2

Lifestyle characteristics

Variable	Characteristic	n (%)
Alcohol consumption	Yes	58 (58.6)
	No	41 (41.4)
Frequency of alcohol consumption	Once per week	5 (12.8)
	1–3 times per week	25 (64.1)
	≥4 days per week	1 (2.6)
	14 days per month	1 (2.6)
	≥15 days per month	7 (17.9)
Smoking	Yes	4 (4)
	No	94 (94.9)
Smoking frequency	1 cigarette per day	1 (24)
	2–4 cigarettes per day	3 (75)
Physical activity	Yes	56 (56.6)
	No	43 (43.4)
Physical activity frequency	Once per week	17 (31.5)
	1–3 times per week	30 (55.6)
	1–3 times per month	7 (12.9)
Discretionary salt & spice	Yes	71 (71.7)
	No	27 (27.3)
Fruit consumption	Yes	70 (70.7)
	No	29 (29.3)
Fruit consumption frequency	Once per day	28 (40)
	2–4 days per week	8 (11.4)
	≥5 days per week	34 (48.6)
Source of cooking oil	Vegetable oil	77 (77.8)
	None	20 (0)

strategies. Almost half (49.5%) of the participants used relaxation techniques, such as meditation, to manage hypertension. Two-thirds (66.6%) maintained a healthy weight, recognizing its importance in hypertension management. Over 60% had made necessary changes to their daily routines, such as getting more sleep or drinking less caffeine.

The high and low perceptions of the participants' attitudes toward hypertension were equal, whereas the practices had an overall high perception compared with the low perceptions (Table 5).

Furthermore, the participants' demographic variables showed no associations with their hypertension knowledge (Table 6). There was a significant association between participants' knowledge and their attitudes ($P < .001$; Table 6) as well as their practices towards hypertension ($P = .008$; Table 6).

5. Discussion

This study aimed to assess the KAP of BP among staff and students at the Hage Geingob Campus, University of Namibia. The participants were mostly educated, single, female students aged 18 to 39 years. Their overall knowledge and practices were good, but their attitudes toward hypertension awareness were moderate. Research has linked higher education to lower hypertension prevalence, especially in females,[2] aligning with our findings of lower BP readings in female participants.

Lifestyle factors play a significant role in hypertension risk. Over 59% of the participants reported consuming alcohol at least 1 to 3 times a week, which is higher than in a similar study at an urban university in Uganda.[16] Only 4 participants reported smoking. Smoking was associated with hypertension due to the nicotine and other noxious chemicals found in cigarettes.[17] Physical activity, which is crucial in preventing obesity and related cardiovascular diseases,[1] was reported by 57% of participants, surpassing the rate reported in the Ugandan study.

Nutrition is also key, with high salt and fat intake or low fruit and vegetable consumption being associated with hypertension.[1] Most participants reported using discretionary salt and spices (72%) and vegetable oil (78%) but also consumed fruits (71%). Our findings showed a slightly increased result compared to the findings of another local study, which reported that 60% of participants consumed fruits and vegetables.[18] Despite the salt, spice, and oil usage by most participants, the majority of them also consume fruits which may have a protective effect against hypertension.[19]

Regarding nonmodifiable risk factors, 58 participants had a family history of hypertension, with 33 participants reporting related complications. Despite this, both male and female participants had normal BP readings, with females showing lower systolic BP, consistent with a previous study on university students.[20]

5.1. Knowledge about hypertension

Most participants (84.8%) demonstrated good knowledge about hypertension, consistent with similar studies in Sudan and Nigeria[21,22] and a local study conducted on hypertensive patients.[18] Good knowledge is crucial for positive attitudes toward screening and early health-seeking behaviors. Our study

Table 3

Hypertension family history

Characteristic	N = 99 (%)	Mean ± SD	p-value
Positive family history of hypertension			
Yes	58 (59)	-	-
No	40 (40)		
Unknown	1 (1)		
Family history of known hypertension complications			
Yes	33 (33)	-	-
No	62 (63)		
Female SBP (mm Hg)	76 (77)	113.13 ± 13.70	0.011*
Male SBP (mm Hg)	22 (22)	121.64 ± 13	
Female DBP (mm Hg)	76 (77)	73.58 ± 9.37	0.311
Male DBP (mm Hg)	22 (22)	75.95 ± 10.55	

Data are presented as mean ± standard deviations.

DBP = diastolic blood pressure, SBP = systolic blood pressure.

*P-value < .05 is considered statistically significant.

Table 4

Participant responses on their knowledge of hypertension

Knowledge statements	Responses n (%)				Mean ± SD	Perception
	Strongly agree	Agree	Disagree	Strongly disagree		
1. I have a good understanding of the risk factors associated with hypertension.	40 (40.4)	44 (44.4)	9 (9.1)	6 (6.1)	1.81 ± 0.84	Low
2. I am confident in my ability to identify the symptoms of hypertension.	26 (26.3)	38 (38.4)	26 (26.3)	9 (9.1)	2.18 ± 0.93	High
3. I am knowledgeable about the different treatment options available for hypertension.	22 (22.2)	32 (32.3)	33 (33.3)	12 (12.1)	2.35 ± 0.96	High
4. I understand the dietary and lifestyle changes that can help manage hypertension.	46 (46.5)	31 (31.3)	12 (12.1)	10 (10.1)	1.86 ± 0.99	Low
5. I am aware of the potential complications of uncontrolled hypertension.	35 (35.4)	35 (35.4)	22 (22.2)	7 (7.1)	2.01 ± 0.93	High
6. I know the recommended blood pressure levels for adults.	42 (42.4)	21 (21.2)	18 (18.2)	18 (18.2)	2.12 ± 1.15	High
7. I understand the role that stress can play in the development and management of hypertension.	51 (51.5)	38 (38.4)	4 (4.0)	6 (6.1)	1.65 ± 0.83	Low
8. I am aware of the factors that can influence the effectiveness of medications used to treat hypertension.	22 (22.2)	40 (40.4)	26 (26.3)	11 (11.1)	2.26 ± 0.93	High
9. I have a general understanding of the role that medication plays in managing hypertension.	28 (28.3)	48 (48.5)	16 (16.2)	7 (7.1)	2.02 ± 0.86	High
10. I recognize the importance of regular blood pressure monitoring for all individuals.	51 (51.5)	36 (36.4)	5 (5.1)	7 (7.1)	1.68 ± 0.87	Low
Weighted mean					1.99	

Data are presented as mean ± standard deviations.

Perception: comparison of the mean and weighted mean, where weighted mean = sum of mean/10 statements.

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Table 5

Participant attitudes and practices on hypertension management and control

Attitudes statements	Responses n (%)				Mean ± SD	Perception
	Strongly agree	Agree	Disagree	Strongly disagree		
1. I believe that controlling hypertension is an important part of maintaining overall health and wellness.	73 (73.7)	19 (19.2)	2 (2.0)	5 (5.1)	1.38 ± 0.77	Low
2. I am confident that I can make the necessary dietary and lifestyle changes to manage hypertension.	47 (47.5)	40 (40.4)	6 (6.1)	6 (6.1)	1.71 ± 0.84	High
3. I believe that hypertension can be effectively managed through a combination of medication and lifestyle changes.	60 (60.6)	30 (30.3)	4 (4.0)	5 (5.1)	1.54 ± 0.80	High
4. I am motivated to take the necessary steps to control hypertension and reduce my risk of developing related health complications	58 (58.6)	33 (33.3)	4 (4.0)	4 (4.0)	1.54 ± 0.76	High
5. I believe that hypertension is a serious health issue that requires attention and action.	73 (73.7)	17 (17.2)	4 (4.0)	5 (5.1)	1.40 ± 0.79	Low
6. I am willing to make changes to my daily routine to better manage hypertension.	51 (51.5)	40 (40.4)	2 (2.0)	6 (6.1)	1.63 ± 0.80	High
7. I believe that education and awareness about hypertension are important parts of promoting overall health and wellness.	77 (77.8)	13 (13.1)	4 (4.0)	5 (5.1)	1.36 ± 0.79	Low
8. I am committed to maintaining a healthy blood pressure level and regularly monitoring my blood pressure.	50 (50.5)	38 (38.4)	7 (7.1)	4 (4.0)	1.65 ± 0.79	High
9. I believe that hypertension can be managed through a combination of individual effort and support from healthcare professionals.	69 (69.7)	22 (22.2)	4 (4.0)	4 (4.0)	1.42 ± 0.76	Low
10. I understand that managing hypertension requires long-term commitment and dedication.	69 (69.7)	17 (17.2)	6 (6.1)	7 (7.1)	1.51 ± 0.90	Low
Weighted mean					1.51	
Practices statements						
1. I regularly monitor my blood pressure as part of my efforts to control hypertension.	17 (17.2)	22 (22.2)	37 (37.4)	23 (23.2)	2.67 ± 1.02	High
2. I consistently engage in regular physical activity as a way of managing hypertension.	27 (27.3)	29 (29.3)	26 (26.3)	17 (17.2)	2.33 ± 1.06	High
3. I make dietary changes, such as reducing sodium intake, to manage hypertension.	26 (26.3)	28 (28.3)	29 (29.3)	16 (16.2)	2.35 ± 1.04	High
4. I follow a personalized plan to manage or reduce the occurrence of hypertension that may or may not involve medication.	19 (19.4)	25 (25.5)	32 (32.7)	22 (22.4)	2.58 ± 1.05	High
5. I have regular checkups with my healthcare provider to monitor my blood pressure levels.	15 (15.2)	15 (15.2)	40 (40.4)	29 (29.3)	2.84 ± 1.02	High
6. I avoid smoking and limit my alcohol intake as a way of managing hypertension.	67 (67.7)	10 (10.1)	9 (9.1)	13 (13.1)	1.68 ± 1.10	Low
7. I make an effort to reduce my stress levels, as stress can contribute to hypertension.	32 (32.3)	42 (42.4)	19 (19.2)	6 (6.1)	1.99 ± 0.88	Low
8. I use relaxation techniques, such as meditation or deep breathing, to manage hypertension.	22 (22.2)	27 (27.3)	31 (31.3)	19 (19.2)	2.47 ± 1.04	High
9. I maintain a healthy weight as a way of managing hypertension.	32 (32.3)	34 (34.3)	20 (20.2)	13 (13.1)	2.14 ± 1.02	Low
10. I have made necessary changes to my daily routine, such as getting more sleep or reducing caffeine intake, to manage hypertension.	30 (30.6)	29 (29.6)	22 (22.4)	17 (17.3)	2.27 ± 1.08	Low
Weighted mean					2.33	

Data are presented as mean ± standard deviations.

Perception: comparison of the mean and weighted mean, where weighted mean = sum of mean/10 statements.

observed a high perception of the medication's role in hypertension management (76.8%), in contrast to a Nigerian study where only 17.5% of respondents shared this perception.[23] However, areas with low perceptions included understanding risk factors, dietary and lifestyle modifications, the role of stress, and BP monitoring, suggesting a need for targeted awareness campaigns.

There were associations found between knowledge and practices ($P = .008$). This same conclusion was reached in another study, which argued that improved practices stem from solid knowledge, resulting in healthier lifestyles and the prevention of hypertension-related complications.[24]

5.2. Attitudes about hypertension

Overall attitudes towards hypertension were moderate, with equally high and low perceptions. This differs from a previous study among adult Nigerian residents who reported good attitudes corresponding with good knowledge.[12] The predominantly student sample may be too focused on academics or feel "too young" to be affected by hypertension,[4] potentially explaining the moderate attitudes despite good knowledge.

The participants' attitude was significantly associated with their knowledge, which suggests that a better understanding of hypertension would lead to improved attitudes toward prevention or management of the disease.[24]

5.3. Practices about hypertension

The study revealed mixed practices for the management of hypertension. Only 39.4% of the participants regularly monitored their BP, and 69.7% did not monitor it with healthcare providers. However, more than half reported engaging in regular physical activities and making dietary modifications to manage hypertension, comparable to an Ethiopian study that found 50% good practices for lifestyle modification.[25]

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Table 6

Associations between knowledge with participants' demographics, attitudes and practices

Variable		Knowledge		Total (n)	Chi-square (*P*-value)
		Good	Average		
Sex	Male	10	12	22	.214
	Female	38	31	69	
Marital status	Not married	43	41	84	.208
	Married	5	2	7	
Qualification	None	1	0	1	.593
	Secondary education	34	34	68	
	Tertiary education	12	9	21	
Occupation	Unemployed	31	28	59	-
	Employed	16	13	29	
Attitudes	Good	47	1	48	<.001
	Average	36	5	41	
	Poor	3	1	4	
Practices	Good	22	20	42	.008
	Average	11	23	34	
	Poor	1	2	3	

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Many participants reported making lifestyle changes to manage hypertension, including avoiding smoking, limiting alcohol intake, reducing stress, maintaining a healthy weight, and adjusting daily routines such as improving sleep and reducing caffeine intake. These findings align with those of another Namibian study[18] and a study by Shrestha et al,[26] indicating a high level of awareness and a positive trend in hypertension management practices.

This study had limitations of a skewed age distribution, with most participants being students compared to the older staff members. A better representation More female participants in the study may have also skewed the findings toward the female population. This was however a sample of the campus population, which has a high proportion of female students and staff. This study was done as part of World Heart Day to raise awareness. The lack of a diverse age range may have been due to the short data collection period.

6. Conclusion

This study provides valuable insights into the KAP regarding hypertension among health science students and staff at the University of Namibia. Although knowledge levels are generally good, there is room for improvement in attitudes and certain practices. These findings highlight the importance of continued education and awareness campaigns, even among those in health-related fields. This study was limited by the uneven age distribution and gender imbalance among participants.

Future studies should strive to include a more diverse range of ages and equal representation of both sexes. Additional research could also explore the reasons behind the discrepancy between knowledge and attitudes and investigate effective strategies to translate good knowledge into positive attitudes and practices in hypertension management.

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Author contributions

Conceptualization: Tuwilika PT Keendjele, Zibusiso Mkandla.
Data curation: Tuwilika PT Keendjele, Mondjila Amkongo, Frank Mojiminiyi, Johanna Namene, Ottilie KH Katali, Tunelago E Nashihanga, Josefina Nelongo, Moneni L Shilumba, Zibusiso Mkandla.
Formal analysis: Tuwilika PT Keendjele, Mondjila Amkongo, Johanna Namene, Katrina Niiteta.
Funding acquisition: Tuwilika PT Keendjele, Zibusiso Mkandla.
Investigation: Tuwilika PT Keendjele, Johanna Namene, Katrina Niiteta.
Project administration: Tuwilika PT Keendjele, Katrina Niiteta, Ottilie KH Katali, Tunelago E Nashihanga, Josefina Nelongo, Moneni L Shilumba, Zibusiso Mkandla.
Supervision: Tuwilika PT Keendjele.
Writing—original draft: Tuwilika PT Keendjele, Mondjila Amkongo, Johanna Namene, Katrina Niiteta, Ottilie KH Katali, Tunelago E Nashihanga, Josefina Nelongo, Moneni L Shilumba, Zibusiso Mkandla.
Writing—review & editing: Tuwilika PT Keendjele, Frank Mojiminiyi.
Methodology: Mondjila Amkongo.
Visualization: Mondjila Amkongo

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