Original Article

Prevalence and Practices Relating to Hypertension among Rural Dwellers in Oka Community Ikpoba Okha Local Government Area in Edo State

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ABSTRACT

Context: The increase in the adult population, and change in the lifestyle of Nigerians, the burden of hypertension (HTN) may continue to increase as time unfolds.

Aims: The aim of this study is to assess the knowledge, prevalence, and practices relating to HTN among rural dwellers.

Settings and Design: The study was carried out in the Oka community in Ikpoba Okha Local Government Area, Edo State, using descriptive cross-sectional study design.

Materials and Methods: A sample size of 260 was obtained using the formula for estimating a sample size of an unknown population based on an average prevalence rate from six studies. A self-structured questionnaire and blood pressure apparatus served as an instrument for data collection. The instrument was validated and tested for reliability with a Cronbach coefficient of 0.82, 0.79 and 0.90.

Statistical Analysis Used: Descriptive statistics and binary logistic regression were used to analyse the data.

Results: The result from the study shows that 246 (94.6%) have heard of HTN, and the prevalence of HTN among the respondents was found to be 47.7%. However the level of knowledge about HTN is very low as 238 (91.5%) of the respondents have poor knowledge. Practices increasing the risk for HTN include adding raw slat to food on the table (2.000), consumption of fatty foods (2.000), not performing the exercise (2.025) and sniffing of tobacco (2.025).

Conclusions: The multivariate binary logistic regression showed that sex, age, marital status and occupation are significantly associated with practice relating to HTN. The study, therefore, recommends regular exercises among the rural dwellers and awareness campaign is needed to enlighten the rural dwellers on the causes and prevention of HTN.

Key words: Hypertension, knowledge, practice, prevalence, rural dwellers

INTRODUCTION

Hypertension (HTN) is among the leading cause of the burden of non-communicable diseases in developing countries. The World Health Statistics 2012 report that one in three adults worldwide has a raised blood pressure (BP), a condition that causes around half of all deaths from stroke and heart disease. Unfortunately, HTN is often occurred unnoticed and undiagnosed because it is usually asymptomatic, and as such, many people with HTN are unaware of their condition. The level of awareness of HTN varies considerably between countries and regions. In economically developed countries, there were relatively high levels of awareness, with approximately one-half to two-thirds of hypertensive aware of their diagnosis.[1]

In Nigeria, HTN is the most common cardiovascular disease reported.[2] Many community-based studies have reported varying prevalence rates of HTN in various parts of the country.

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Due to changing trends in the epidemiology of HTN and its effects, there is a great need for regular surveillance on the prevalence of HTN to implement effective control strategies. The prevalence of HTN in Nigeria may form a substantial proportion of the total burden in Africa because of the large population of the country currently estimated to be over 180 million.[3] With an increase in the adult population and change in the lifestyle of Nigerians, the burden of HTN may continue to increase as time unfolds.

In Lagos Nigeria, a study on the prevalence of HTN among Urban Slum-dwellers reveals an overall prevalence of 38.2% (368/964), the prevalence of HTN was found to increase steadily with age.[4] Furthermore, a study in Ogbomoso reported the prevalence of HTN to be 20.1% among the studied population.[1] In Owerri southeast Nigeria, it was revealed that the proportion of all respondents with HTN in their study was 12.4%; the highest number of respondents with HTN was in the 41–50 year age group, of the 24 who are hypertensive, 19 (79.2%) are males.[5] A similar study in Ekiti, southwest, Nigeria, showed that the prevalence of HTN in Ekiti State was 524/1590 (33.0%): 338/957 (35.3%) in the rural and 186/633 (29.4%) in the urban.[6] More also, the prevalence of HTN among inter-city drivers in an urban city in south-south Nigeria, revealed that prevalence of HTN was 21.4%, raised BP was significantly associated with duration of driving experience, family history and age.[7] With regard to practices relating to the risk of HTN, excessive salt intake 195 (77.4%), alcohol intake 120 (47.6%) and best practices in relation to prevention were found for irregular consumption of alcohol 213 (84.5%), regular exercise was 144 (57.1%), regular checking of blood was 108 (42.9%), and weight reduction practice was 108 (42.8%).[8] Similarly, Aghoja *et al*. in Delta State, revealed that 8.8% of respondents in their study were smokers,[9] while alcoholics (25.5%), sedentary life (81.3%) and smoking (19.1%), were reported in Samarkand.[10]

Lack of knowledge and awareness about HTN is a major problem as many people in rural areas are ignorant of their health status and may not know that they are hypertensive. Since HTN often occur unnoticed and undiagnosed because it is usually asymptomatic and many people with HTN may be unaware of their condition, therefore knowing the level of knowledge of HTN among the people, prevalence and practices relating to the risk of HTN in a particular area become very important to help take informed decision and policies geared toward preventing and managing this condition as well as reducing its associate mortality and mobility. This study is, therefore, carried out to assess knowledge, prevalence and practices relating to HTN among rural dwellers in the Oka community in Ikpoba Okha Local Government Area (LGA).

The specific objective are:
- To assess the level of knowledge on HTN among the rural dweller in the Oka community in the Ikpoba Okah LGA
- To determine the practices relating to the risk of HTN among the rural dweller in the Oka community, Ikpoba Okah LGA
- To ascertain the prevalence of HTN among the rural dweller in Oka community, Ikpoba Oka LGA
- To assess the perceived factors influencing the practices relating to risk of HTN among the rural dweller in the Oka community, Ikpoba Okah LGA.

Hypothesis

There is no significant association between practices relating to the risk of HTN and sociodemographic characteristics of the respondents in the Oka community.

There is no significant association between the sociodemographic characteristics and the prevalence of HTN among the respondents in the Oka community.

MATERIALS AND METHODS

A descriptive cross-sectional research design was adopted. The study was conducted in the Okha community in Ikpoba Okha LGA of Edo State, Nigeria. The study population includes all adult; male and female (18 and above) residing in Okha community. A sample size of 268 comprising males and females was used for the study. The sample size was calculated by taking the prevalence rate of six studies; 38%, 20%, 12%, 33%, 12% and 21% and the average prevalence of 21% was used as the P value in Daniel formula of the unknown population using the prevalence of past studies $n = \dfrac{Z^2 pq}{d^2}$. (Daniel, 1999) where n = the minimum sample size when the population is >10,000, Z = the standard normal deviate, (usually set at 1.96) which corresponds to the 95% confidence level, P = the proportion in the target population estimated to have particular characteristics, $q = 1 - p$, d = degree of accuracy desired, usually set at 0.05.

A systematic random sampling technique (n[th] term) was used to select the subjects into the study. This involves choosing one compound from every five compound enumerated. All adult males and females in that compound who consented to participate were automatically selected for the study. Two instruments were used for the study; a self-structured questionnaire and BP measurement apparatus. The questionnaire constructed comprised of four sections: Section A: sociodemographic data B: consists of 8 items assessing knowledge of HTN.

Section C: Practices relating to risk of HTN which consists of 7 items. Section D: perceived factors influencing practices relating to HTN. Validity of Instrument: Validity of the instrument was ensured by giving it to two experts in the field of epidemiology who are also knowledgeable in measurement and statistics from the university of Benin for scrutiny in relation to the researched objectives. Reliability: A pilot study was carried out among 20 rural dwellers. Using split-half relativity technique. Data were analysed and the Cronbachs alpha reliability value of 0.82, 0.79 and 0.90 was obtained for awareness of HTN, practices relating to HTN, factors influencing the practices respectively.

Method data collection

With the help of two research assistants, the questionnaires were trained, the questionnaires were administered along with the measurement of the subject BP. This was done every evening after informed consent has been obtained from the respondents for 8 weeks. Data were collected from January to March 2019.

Data analysis

Descriptive statistics were used, and hypotheses were tested using Chi-square and binary logistic regression. This was carried out using the IBM Statistical Package for Social Sciences version 24.0. Ethical consideration: Ethical approval with no HA577/VOL. 2/195 obtained after submission of the proposal to the ethics and research committee of the ministry of health Edo State.

RESULTS

Table I shows sociodemographic characteristics of respondents. Respondents sex shows that 138 (53.1%) are male, 122 (46.9%) are female. Respondents' age group shows that 163 (62.7%) are within the age group of 18–23 years, 58 (22.3%) are 35 years and above. Respondents marital status shows that 64 (24.6%) are married, 171 (65.8%) are single, 14 (5.4%) are widowed, 11 (4.2%) are divorced. Level of education shows that 5 (1.9%) have no formal education, 186 (71.5%) are educated to the tertiary level. Respondents' occupation shows that 24 (9.2%) work in the government sector, 23 (8.8%) work in the private sector, 97 (37.3%) are self-employed, 116 (44.6%) are unemployed. Respondents monthly income shows that 114 (43.8%) have no monthly income, 24 (9.2%) receive a monthly income < N10,000, 46 (17.7%) receive a monthly income between N11000–20,000, 10 (3.8%) receive a monthly income between N21000–30,000, 18 (6.9%) receive a monthly income of N31000–40,000, 15 (5.8%) receive a monthly income of N41000–50,000, 33 (12.7%) received a monthly income above N50,000. Respondents parity shows that 160 (61.5%) have not given birth, 14 (5.4%) have one child, 62 (23.8%) have between 2 and 4 children, 24 (9.2%) have 5 children and above. Respondents religion shows that 225 (86.5%) are Christians, 12 (4.6%) are Muslims, 15 (5.8%) are traditionalists, 8 (3.1%) practice other religions not listed in the questionnaire. Respondents ethnicity shows that 44 (16.9%) are Yoruba's, 54 (20.8%) are Igbo's 5 (1.9%) are Hausa's, 92 (35.4%) are Benin's, 65 (25.0%) are from other ethnic groups not listed in the questionnaire.

Table II shows that 246 (94.6%) are have heard of HTN. However, the level of knowledge about HTN is very low as 238 (91.5%) of the respondents have poor knowledge, while the remaining 22 (8.5%) have good knowledge.

Table III above shows practice relating to HTN among respondents. It shows that measuring BP regularly (1.666), not consuming alcohol (1.545), checking of body weight (1.776), not engaging in smoking (1.789), and not engaging in stressful activities (1.776) are some of the practices relating to reducing

Table I: Socio-demographic characteristics of respondents (*n* = 260)

Variables	Attributes	Frequency (%)
Sex	Male	138 (53.1)
	Female	122 (46.9)
Age (years)	18-23	163 (62.7)
	24-29	19 (7.3)
	30-35	20 (7.7)
	>35	58 (22.3)
Marital status	Married	64 (24.6)
	Single	171 (65.8)
	Widowed	14 (5.4)
	Divorced	11 (4.2)
Level of education	No formal education	5 (1.9)
	Primary	12 (4.6)
	Secondary	57 (21.9)
	Tertiary	186 (71.5)
Occupation	Government sector	24 (9.2)
	Private sector	23 (8.8)
	Self-employed	97 (37.3)
	Unemployed	116 (44.6)
Monthly income (Naira)	None	114 (43.8)
	<10,000	24 (9.2)
	11,000-20,000	46 (17.7)
	21,000-30,000	10 (3.8)
	31,000-40,000	18 (6.9)
	41,000-50,000	15 (5.8)
	>50,000	33 (12.7)
Parity	0	160 (61.5)
	1	14 (5.4)
	2-4	62 (23.8)
	5 and above	24 (9.2)
Religion	Christian	225 (86.5)
	Islam	12 (4.6)
	Traditional	15 (5.8)
	Others	8 (3.1)
Ethnicity	Yoruba	44 (16.9)
	Igbo	54 (20.8)
	Hausa	5 (1.9)
	Benin	92 (35.4)
	Others	65 (25.0)
Categories, BPs		
Normal	100/60-120/80 mmHg	136 (52.3)
Prehypertensive	120/80-139/89 mmHg	51 (19.6)
Hypertensive	140/90-170/90 mmHg	73 (28.1)

BP: Blood pressure

the risk for HTN practiced by the respondents. While practices relating to increasing the risk for HTN include adding raw slat to food on the table (2.000), consumption of fatty foods (2.000), not performing exercise (2.025), and sniffing of tobacco (2.025).

Table IV above shows factors influencing practices increasing the risk for HTN. It is shown on in the table that lifestyle (2.521), lack of knowledge (2.613), cultural belief (3.142) and peer group influences (2.590) are some of the factors which influence practices increase the risk for HTN among the respondents.

Table II: Respondent's knowledge of hypertension

	Yes (%)	No (%)
Have you heard of HTN	246 (94.6)	14 (5.4)

Knowledge items variables	Frequency (%)	
Incorrect responses	**Correct responses**	
What does the term HTN mean	176 (67.7)	84 (32.3)
HTN is a non-communicable disease that can be prevented	187 (71.9)	73 (28.1)
HTN only affects middle age and old people?	152 (58.5)	108 (41.5)
HTN is contagious and may be carried from one person to another?	244 (93.8)	16 (6.2)
HTN can be cured and then the treatment can be discontinued?	121 (46.5)	139 (53.5)
People who suffer from HTN feel sick when their BP is high?	219 (84.2)	41 (15.8)
Proper treatment for HTN can help avoid heart attacks, strokes and kidney failure?	234 (90.0)	26 (10.0)
HTN can be detected by measuring the BP regularly	233 (89.6)	27 (10.4)

Level of knowledge		
Variables	**Percentage score on knowledge questions**	**Frequency (%)**
Poor knowledge	0-49	238 (91.5)
Good knowledge	50.0-100.0	22 (8.5)
Total	Total	260 (100.0)

HTN: Hypertension, BP: Blood pressure

Table III: Respondents practices relating to increase risk for the development of hypertension

Items	Frequent (3)	Occasional (2)	Never (1)	Mean	Remark
How often do you measure your BP?	35 (13.5)	102 (39.2)	123 (47.3)	1.660	PRRH
How often do you add raw salt to your food when eating?	70 (26.9)	107 (41.2)	83 (31.9)	2.000	PRIRH
How often do you consume fatty food?	76 (29.2)	105 (40.4)	79 (30.4)	2.000	PRIRH
How often do you consume alcohol? (R)	45 (17.3)	52 (20.0)	163 (62.7)	1.545	PRRH
How often do you avoid performing physical exercise?	83 (31.9)	101 (38.8)	76 (29.2)	2.025	PRIRH
How often do you check your body weight?	33 (12.7)	136 (52.3)	91 (35.0)	1.776	PRIRH
How often do you smoke cigarette? (R)	24 (9.2)	29 (11.2)	207 (79.6)	1.879	PRIRH
How often do you sniff tobacco?	83 (31.9)	101 (38.8)	76 (29.2)	2.025	PRIRH
How often do you perform stressful activities	33 (12.7)	136 (52.3)	91 (35.0)	1.776	PRIRH

*Average mean score of ≥2.00 means PRIRH, while <2.00 means PRPH. PRPH: Practices that can reduces the risk for hypertension, BP: Blood pressure

Table IV: Factors influencing practices increasing the risk for hypertension

Items	SD	D	A	SA	Mean	SD	Decision
My lifestyle affects practices relating to HTN	60 (23.0)	30 (11.5)	144 (55.5)	26 (10.0)	2.521	0.98	Positive
I don't have knowledge about practices relating to HTN	40 (15.4)	40 (15.4)	160 (61.5)	20 (7.7)	2.613	0.88	Positive
I believe HTN is caused by evil spirit	20 (7.7)	57 (21.9)	47 (18.1)	136 (52.3)	3.142	0.99	Positive
I don't have a job to keep me busy	71 (27.3)	108 (41.5)	61 (23.5)	20 (7.7)	2.12	0.90	Negative
I have a case of HTN in my family	105 (40.4)	45 (17.3)	95 (36.5)	15 (5.8)	2.08	1.00	Negative
Peer group pressure exposes me to drinking alcohol	37 (14.2)	70 (26.9)	115 (44.2)	38 (14.6)	2.59	0.91	Positive

*Mean ≥2.50 indicates positive factor (influences practices that increase risk of HTN), <2.50 negative (don't influences practices that increase risk of HTN).
HTN: Hypertension, SD: Standard deviation, SD=1, D=2, A=3, SA=4

Table V above shows the classification of BP, 136 (52.3%) of the respondents have a normal BP, 51 (19.6%) are pre-hypertensive, the remaining 73 (28.1%) are hypertensive. It shows that the prevalence of HTN among the respondents in the community is 47.7%.

Hypothesis

Table VI shows the multivariate logistic regression associating with socio-demographic characteristics and level of practice.

The result shows that females are five times (odds ratio [OR] = 4.57, confidence interval [CI] = 2.18–9.55) more likely to have good practice than males. Those that are 18–23 years are four times more likely to have good practice than those below 18 years. Respondents that are divorced are nine times more likely to have good practice than those married. Those that are self-employed are thirty times more likely to have good practice than those in the government sector, while those unemployed are nine times more likely to have good practice

Table V: Prevalence of hypertension among the respondents in Oka community

Classification of BP	Frequency (%)
Normal (100/60-120/90 mmHg)	136 (52.3)
Prehypertensive (120/180-139/89 mmHg)	51 (19.6)
Hypertensive (140/90-170/90 mmHg)	73 (28.1)

$$\text{Prevalence of HTN} = \frac{number\ of\ (pre-HTN)+(HTN)}{total\ number\ of\ respondents} \times 100\%$$

$$\frac{51+73}{260} \times 100$$

$$\frac{124}{260} \times 100 = 47.69\%$$

HTN: Hypertension, BP: Blood pressure

Table VI: Multivariate logistic regression of association between practices relating to risk of hypertension and socio-demographic characteristics of the respondents in Oka community

	P	OR	95% CI for OR
Sex			
Male		1.00	
Female	0.000*	4.57	2.18-9.55
Age (years)			-
Below 18		1.00	
18-23	0.033*	4.40	1.13-17.15
24-29	0.109	5.16	0.69-38.36
30-35	0.230	0.27	0.03-2.28
>34	0.489	2.08	0.26-16.45
Marital status			
Married		1.00	
Single	0.433	1.79	0.42-7.73
Widowed	0.179	0.24	0.03-1.92
Divorced	0.015	9.26	1.53-55.85
Level of education			
No formal education		1.00	
Primary	0.543	2.35	0.15-36.72
Secondary	0.348	3.03	0.30-30.65
Tertiary	0.312	3.31	0.33-33.72
Occupation			
Government sector		1.00	
Private sector	0.002*	30.11	3.37-269.41
Self-employed	0.074	5.04	0.85-29.74
Unemployed	0.027*	9.37	1.28-68.31
Monthly income (Naira)			
None		1.00	
<10,000	0.571	1.49	0.38-5.92
11,000-20,000	0.964	0.97	0.29-3.24
21,000-30,000	0.978	1.03	0.13-8.11
31,000-40,000	0.238	2.84	0.50-16.07
41,000-50,000	0.499	0.54	0.09-3.27
>50,000	0.003	16.14	2.52-103.51
Parity			
0		1.00	-
1	0.176	0.27	0.04-1.80
2-4	0.872	0.90	0.26-3.10
5 and above	0.555	0.61	0.12-3.10
Religion			-
Christian		1.00	
Islam	0.701	0.70	0.11-4.36
Traditional	0.092	0.21	0.03-1.29
Others	0.230	5.46	0.34-87.27
Ethnicity			
Yoruba		1.00	
Igbo	0.241	0.49	0.15-1.62
Hausa	0.822	1.33	0.11-15.42
Benin	0.519	1.46	0.46-4.57
Others	0.964	0.97	0.29-3.27
Constant	0.009	0.01	

*$P<0.05$. OR: Odds ratio, CI: Confidence interval

than those working in the government sector. Respondents that are earning more than N50,000 are sixteen times more likely to have good practice than those that donot earn anything. The other socio-demographic characteristics are not significantly associated with practice relating to HTN.

Table VII shows the multivariate logistic regression associating socio-demographic characteristics and the prevalence of HTN. The result shows that females are twice (OR = 1.83, CI = 0.97–3.42) more likely to have HTN than males. Respondents that have primary education are two times (OR = 2.42, CI = 0.48–12.07) to have HTN than those with tertiary education. Respondents that are Igbos are five times more likely to have HTN than those from Yoruba, Benins are three times more likely to have HTN than the Yorubas, while respondents that are from other tribes are nine times more likely to have HTN than the Yorubas. The only significant ($P < 0.05$) socio-demographic characteristics associated with the prevalence of HTN is ethnicity, other characteristics are not statistically significant ($P > 0.05$).

DISCUSSION OF FINDINGS

The findings from this study reported a very high awareness level of HTN (94.6%). The awareness level of HTN in this study is far doubled the figure (44%) reported in Owerre-Nkwoji, Imo state Nigeria,[11] and in a tertiary institution in Nigeria which showed that in the tertiary institution the level of awareness and control of HTN is still far less with 78.4% of hypertensive not being aware that they had the condition and were incidentally diagnosed.[12] The major source of information reported in this study was (37.7%) is mass media, followed by those that got their information from doctors (26.9%), the least was those who got their information from the church. About two-fifth (40.4%) of the respondents reported that a member of their family had been diagnosed of HTN. Majority (71.9%) of the respondents reported that they are aware that HTN can be prevented.

The level of knowledge about HTN in this study is very low (8%). Similar findings were reported in Egypt, where only 12.9% had a good level of knowledge.[13] The level of

good knowledge reported by in Benin City, Nigeria though still low but higher (40.7%) than the index study.[14] However,

Table VII: Multivariate logistic regression association of socio-demographic characteristics and prevalence of hypertension

	P	OR	95% CI for OR
Sex			
Male	0.060	1.83	0.97-3.42
Female		1.00	
Age group (years)			-
<18	0.472	0.49	0.07-3.45
18-23	0.477	0.58	0.13-2.57
24-29	0.417	0.50	0.09-2.66
30-35	0.645	0.73	0.20-2.74
>35		1.00	
Marital status			-
Married	0.431	0.45	0.06-3.26
Single	0.211	0.26	0.03-2.15
Widowed	0.559	0.51	0.05-4.90
Divorced		1.00	
Level of education			-
No formal education	0.965	1.05	0.11-10.25
Primary	0.281	2.42	0.48-12.07
Secondary	0.690	1.21	0.47-3.13
Tertiary		1.00	
Occupation			-
Government sector	0.996	1.00	0.17-5.99
Private sector	0.348	2.00	0.47-8.48
Self-employed	0.561	0.76	0.30-1.91
Unemployed		1.00	
Monthly income (Naira)			-
None	0.179	0.37	0.08-1.59
<10,000	0.748	0.77	0.15-3.83
11,000-20,000	0.401	0.53	0.12-2.31
21,000-30,000	0.967	0.96	0.12-7.42
31,000-40,000	0.904	0.91	0.18-4.53
41,000-50,000	0.111	6.89	0.64-73.72
>50,000		1.00	
Religion			-
Christian	0.537	0.51	0.06-4.34
Islam	0.688	1.72	0.12-24.17
Traditional	0.476	0.40	0.03-5.04
Others		1.00	
Ethnicity			-
Yoruba		1.00	
Igbo	0.006	5.27	1.61-17.25
Hausa	0.999	1.00	0.09-11.72
Benin	0.028	3.35	1.14-9.84
Others	0.000	8.63	2.58-28.89
Constant	0.579	2.36	

OR: Odds ratio, CI: Confidence interval

in selected areas of Bangladesh, it was reported that more than half (56.36%) of the respondents had the proper knowledge on HTN.[15] In Owerri, a high (98%) level of knowledge on HTN was also reported.[5] The level of knowledge in this index study is significantly very low compared to other studies cited. The reason for the high level is not farfetched because the respondents in these studies are persons with at least a tertiary education, unlike this study that reported that a mixture of different academic levels. Also, the present study was done in a rural environment while the other studies;[5,14,15] were done in an urban setting. However, the finding from this study supports the Ghanaian study which reported that <5% of the participants showed good level of knowledge in the causes, signs and symptoms, risk factors, prevention and treatment of HTN.[16]

A few proportions of the respondents (13.5%) reported that they measure their BP frequently, this figure is a little lower than the reported statistics in Owerri where 20% of respondents are aware of their BP readings. The practice of frequent intake of moderate salt was low (26.9%) as many did not moderate their salt intake, which could lead to HTN.[11] However, this figure is similar to that reported among rural Nigerian women whose result showed a moderate salt intake of 22.6%. It was reported by 45 (17.3%) of the respondents that they frequently consumed alcohol.[8] This figure does not agree with the finding reported among rural area of Lahore, Pakistan, where 39.0% of the respondents never consumed alcohol, 83 (31.9%) of the respondents frequently perform physical exercise, 33 (12.7%) of the respondents frequently check their body weight. The proportion of smokers in this study were very low as only (9.2%) of the respondents reported that they frequently smoke.[17] Further analysis in the index reveals that measuring BP regularly (1.666), not consuming alcohol (1.545), checking of body weight (1.776), not engaging in smoking (1.789), and not engaging in stressful activities (1.776) are some of the good practices relating HTN practiced by the respondents. While bad practices relating to HTN include adding raw salt to food on the table (2.000), consumption of fatty foods (2.000), not performing the exercise (2.025), and sniffing of tobacco (2.025).

Supporting these findings is Azubuike and Kurmi who reported excessive salt intake 195 (77.4%), alcohol intake 120 (47.6%) were some of the bad practices. Best practices were found to be irregular consumption of alcohol 213 (84.5%), regular exercise was 144 (57.1%), regular checking of blood was 108 (42.9%), and weight reduction practice was 108 (42.8%).[8] Collaborating further the findings of the index study is the study done in a rural area of Lahore, Pakistan.[16] The result revealed that most patients occasionally measured their BP (49.6%), moderated their salt intake 48.3%, avoided fatty foods (46.5%), frequently measured body weight (35.6%), never consumed alcohol (39.0%), never smoked (21%), never missed their medication (13.2)%. More awareness campaign is still need in the area of regular exercise and avoiding fatty food, the need to switch over to vegetable food should be emphasized.

The prevalence of HTN in this study is (47.7%). This is higher than 38.2% (368/964) reported among Urban Slum Dwellers in Lagos, Nigeria, with the prevalence increasing steadily with age.[4] Owolabi, in Ogbomoso, also reported a lower prevalence rate of 20.1% among the studied population.[1] In Owerre, Nigeria, the prevalence of 12.4% reported was far lower compared to the index study.[5] These

differences in the prevalence can be attributed to the different geographical settings, occupation and different levels of education that characterize the populations in these various studies. Further findings from the study show that females are twice (OR = 1.83, CI = 0.97–3.42) more likely to have HTN than males. Respondents that have primary education are two times (OR = 2.42, CI = 0.48–12.07) to have HTN than those with tertiary education. This may be due to the availability of information with regards to the prevention of HTN and the ability to read and understand books, tracts, leaflet, etc., which the uneducated person may not be privilege to. Respondents that are Igbos are five times more likely to have HTN than those from Yoruba; Benin's are three times more likely to have HTN than the Yorubas. This can be attributed to the busy nature or the merchandized nature of Igbo's exposing to stress. The findings of this study have potential implications both for nursing clinical practice and research paradigms. The community health physicians/community health nurse practitioner has a key role in providing essential care to individual, family and community and therefore needs to incorporate prevention strategies in their practice. More awareness campaign is needed to sensitize the rural community of the causes and prevention of HTN.

CONCLUSIONS

This study assessed the knowledge, practice and the prevalence of HTN among rural dwellers in the Oka community in the Ikpoba Okha LGA. The result shows that the respondents have a high awareness of HTN but a low knowledge level of HTN. This low level of knowledge could be also attributed to their bad practice relating to HTN. Hence more awareness campaign is needed to enlighten the rural dwellers on the causes and prevention of HTN.

Limitations of the study

First, this research was conducted in only one community, more community and LGA s of Edo state could have been included to allow for generalization in Edo State.

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Conflicts of interest

There are no conflicts of interest.

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