

# Evaluation of the Prevalence, Knowledge, Attitude, and Practice of Hypertension among Adults in Famgbe Community

Obele W. Philip<sup>1</sup>, Owonaro A. Peter<sup>1\*</sup>, Eniojukan F. Joshua<sup>1</sup>, Owonaro E. Daugther<sup>2</sup>, Seiyefa F. Brisibe<sup>2</sup>

<sup>1</sup>Niger Delta University, Wilberforce Island Bayelsa State., Faculty of Pharmacy, Department of Clinical Pharmacy and Pharmacy Practice.

<sup>2</sup>Niger Delta University, Wilberforce Island Bayelsa State., Faculty of Clinical Sciences, Department of Family Medicine.

\*Corresponding author: Owonaro A. Peter.

## Abstract

Hypertension is a public health issue that has consequences of cardiovascular diseases and should be researched and prevented, so in a bid to ascertain the prevalence, knowledge, attitude, and practices of hypertension in a rural area; Famgbe Community of Yenagoa, Bayelsa State was selected and a descriptive cross-sectional survey was done in the community among persons aged 18 years and above, using an administered questionnaire, it was administered to 314 respondents. In the study the prevalence of hypertension was 48 (15.3%), 76.1% reported knowing what blood pressure is, and 93.4% agreed that regular blood pressure checking is important. 16.9% of respondents reported that they regularly check their blood pressure while 81.5% reported that they do not exercise regularly. Our findings showed that more than half of the study population had appropriate practices toward hypertension. Still, more education has to be provided in the community to enhance community healthcare and health conditions.

**Keywords:** prevalence; knowledge; attitude; hypertension

## Introduction

Hypertension (HTN) is still a major global public health issue, with cardiovascular disease being a primary cause of death and morbidity (Kate et al., 2013). It is the most common non-communicable disease (NCD) in the world, affecting all races with varying prevalence, accounting for one out of every eight deaths globally and ranking as the world's third greatest killer disease. HTN is defined as consistently increased blood pressure (BP) of  $\geq 140/90$  mmHg, based on at least two separate readings (Buang et al. 2019).

HTN is also known as the silent killer because it can go undetected for a long time before being diagnosed, and if a hypertensive patient is not properly managed, it can lead to serious life-threatening complications of vital organs such as the brain, eyes, heart, and kidneys, resulting in death or serious disability (Buang et al. 2019).

In 2010, it was reported that over one billion people had HTN, with a prevalence rate of 26.4%, and this figure is expected to climb to 1.54 billion with a 29.4% prevalence by 2025 (Kate et al 2013). This represents 57 million disability-adjusted life years (DALYs), or 3.7% of total DALYs (Ali et al. 2017).

According to the World Health Organization (WHO), the prevalence of HTN in Africa was 46% in 2008, the highest in the world (Adeloye, et. al., 2015; Kate et. al., 2013).

This WHO finding, while significant for implementing effective public health responses across the continent, reveals a contradicting state of data when compared to other HTN prevalence estimates in Africa, which are relatively lower (Adeloye, et. al., 2014).

The total prevalence of HTN was 28.9%, according to a 2003 national NCDs survey conducted mostly in southwest Nigeria and based on systolic BP of at least 140 mmHg and/or diastolic BP of at least 90 mmHg. Furthermore, recent surveys in various parts of Nigeria using at least 140/90 mmHg have revealed a greater prevalence of HTN, ranging from 25% to 36.6% (Adeloye, et al., 2015).

According to a study conducted by Ezekwesili et al. (2016) in Nigeria, the crude prevalence rate of HTN was 22.8%. A study on knowledge, attitude, and practice sought to show not just distinctive qualities in information, attitude, and health practices, but also the individual's perception of the disease; these factors

are frequently the basis of misperception. (Ralaspawana et al. 2020).

While the outcome of such a study appears basic, the findings can have a significant impact on the local community. When people lack awareness about a disease condition, prevention becomes difficult, hence it is critical to measure their awareness of HTN (Eroc et al. 2012).

Many factors can influence HTN care, but the most significant barrier is a lack of information and awareness about HTN and its problems (Erkoc et al. 2012). Compliance and adherence to antihypertensive drugs can save nearly half of all HTN-related deaths (Chimberengwa et al. 2019).

People who practice healthy lifestyles such as quitting smoking, drinking less alcohol, exercising regularly, and eating a healthy diet, which has been shown to reduce the incidence of HTN, must first understand HTN, the importance of healthy living, and the complications that can result from undiagnosed and poorly managed high blood pressure. Patient education is an important component of HTN control strategies; hence it is necessary to assess the patient's knowledge and awareness of HTN (Chimberengwa et al. 2020).

The purpose of this study is to assess the prevalence, knowledge, attitude, and practice of hypertension and in the Famgbe Community Yenagoa Bayelsa State.

## Research Methodology

### Study site

The study area was Famgbe community situated in the Attisa clan in Yenagoa Local government area of Bayelsa State, Nigeria.

### Study design

A prospective descriptive cross-sectional design was used in this study.

### Sampling technique

Convenience sampling was used to choose the community as an area of study. A simple random sampling (lucky dip) was used to select the participants.

### Data collection

A semi-structured self-report questionnaire was adapted from (Nurul, et. al., 2014 and Ifeoluwa, 2019). A pilot study was carried out, after which adjustments were made to suit the target population.

### Data analysis

IBM SPSS version 27 and Microsoft Excel (Ver. 2013), descriptive statistics such as frequency and mean values were used to present data and further expressed in charts.

### Ethical issues

Approval and permission were obtained from the Ministry of Health, Bayelsa State.

## Results

### Demography of study participants

#### Age of participants

The majority (29%) of respondents were young adults aged 18-25 years.

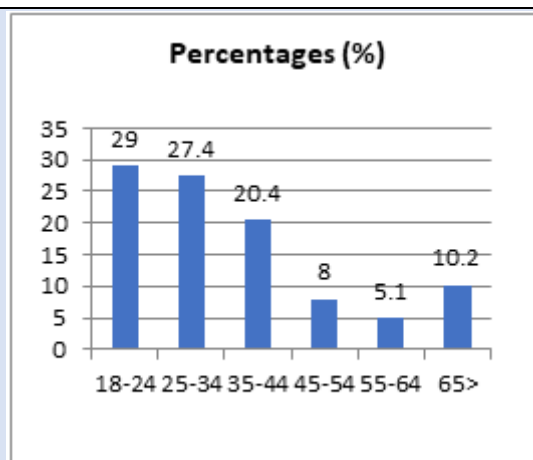


Figure 1: Age of participants

### Gender of participants

The majority (50.6%) of respondents were female.

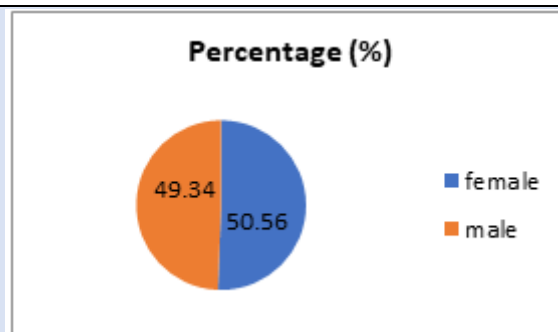


Figure 2: Gender of participants

### Marital status of participants

Most of the respondents were single (43%).

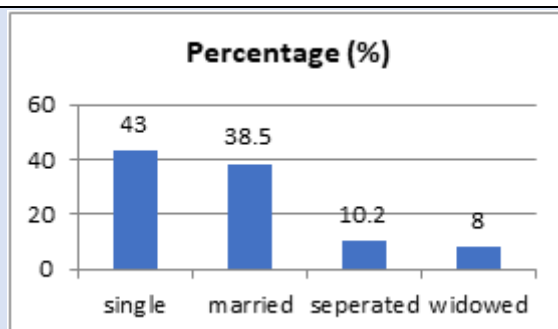


Figure 3: Marital statuses of participants

### Educational status

Participants who had attained a secondary school level formal education level formed the majority of participants (65%).

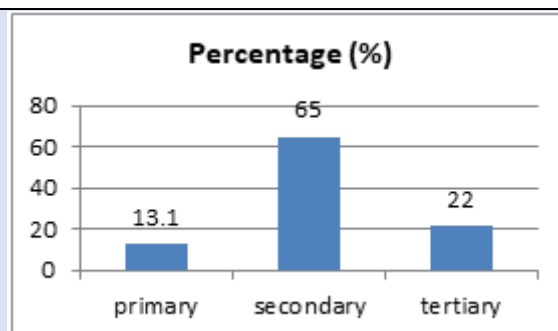


Figure 4: Educational status of participant

**Table 1:** Showing prevalence of hypertension

s/n	Variables	Yes N/%	No N/%	I don't know N/%
1	Do you have high blood pressure?	48 (15.3)	237(75.5)	29(9.2)
2	Do you have a family history of hypertension?	77 (24)	210(66.9)	27(8.6)
3	Has any of your relations died as a result of high blood pressure?	65 (20.7)	192(61.1)	57(18.2)
4	Are you currently on any antihypertensive drugs?	43 (89.6)	5(10.4)	-
5	Have you ever been admitted to the hospital because of hypertension?	25 (52.1)	23(49.9)	
6	When were you diagnosed to be hypertensive? (years)	0-5	6-10	10>
		22 (48.8)	15(31.3)	11(29.9)
7	What type of hypertension do you have?	Mild	Moderate	I Don't Know
		19 (39.6)	6 (12.5)	23(47.9)

8	Family relatives with hypertension.	Father Mother Brother Sister Uncle Aunty	16(21.1) 23(30.3) 9(11.8) 15(19.7) 6(7.9) 7(9.1)
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75.5% of participants reported that they had not been diagnosed of hypertension, and 66.9% reported that they do not have a positive family history of hypertension.

**Table 2:** Showing knowledge regarding hypertension

	variables	Yes N/%	No N/%	I don't know N/%
9	Do you know what high blood pressure is?	239 (76.1)	33(10.5)	42(13.4)
10	Do you know the normal reading of blood pressure?	120(38.2)	117(37.3)	77(24.5)
11	Do you know what complications can arise if blood pressure is not controlled?	158(50.3)	69(22.0)	87(27.7)
12	Will excessive alcohol intake increase your risk of having high blood pressure?	199(63.4)	32(10.2)	83(26.4)
13	Is excessive salt intake one of the risk factors for developing high blood pressure?	178(56.7)	39(12.4)	97(30.9)
14	Is being overweight one of the risk factors for developing high blood pressure?	167(53.2)	49(15.6)	98(31.2)
15	Is being overweight one of the risk factors for developing high blood pressure?	167(53.2)	49(15.6)	98(31.2)
16	Do you know what signs and symptoms of high blood pressure?	186(59.2)	48(15.3)	80(25.5)
17	Do you know that those with high blood pressure take drugs every day to control blood pressure?	253(80.6)	19(6.1)	42(13.4)
18	Is a regular blood pressure check necessary for high blood pressure patients?	259(82.5)	20(6.4)	35(11.1)
	Total	1923	486	731
	Mean (%)	192.3(61.2)	48.6(15.5)	73.1(23.3)

76.1% of participants reported to know what hypertension was, 53.2 reported that they knew that being overweight was a risk factor for coming down with hypertension and 82.5% of participants reported

that they were aware that regular checking of blood pressure is necessary for people living with high blood pressure.

**Table 3:** Showing the attitude towards hypertension

s/n	variables	SA N/%	A N/%	N N/%	SDAN/%	DA N/%
19	Reduction of salt intake prevents hypertension.	147(46.8)	67(21.3)	73(23.3)	3(1.0)	24(7.6)
20	Regular checking of blood pressure is important.	214(68.2)	79(25.2)	15(4.8)	0(0.0)	6(1.9)
21	Regular visits to the hospital or healthcare centre are good for control of blood pressure.	208(66.2)	80(25.5)	17(5.4)	3(1.0)	6(1.9)
22	Regular medication is important in high blood pressure treatment.	212(67.5)	77(24.5)	20(6.4)	1(0.3)	4(1.3)
23	Regular exercise is good for a healthy lifestyle.	219(69.7)	79(25.2)	9(2.9)	1(0.3)	6(1.9)
24	Eating plenty of fruits is advisable	211(67.2)	79(25.2)	18(5.7)	0(0)	6(1.9)
25	Smoking should be avoided	212(67.5)	81(25.8)	15(4.8)	0(0)	6(1.9)
26	Drinking alcohol should be avoided	214(68.2)	81(25.8)	13(4.1)	0(0)	6(1.9)
27	Red meat should be avoided.	173(55.1)	74(23.6)	57(18.1)	4(1.3)	6(1.9)
28	Fish is preferable to meat.	159(50.6)	98(31.2)	15(4.8)	10(3.2)	32(10.2)
29	Fatty foods should be avoided.	214(68.2)	79(25.2)	15(4.8)	0(0)	6(1.9)
30	Hypertension can be cured.	17(5.4)	32(10.2)	36(11.5)	123(39.2)	106(33.8)
31	Hypertension can be inherited.	207(65.9)	86(27.4)	15(4.8)	0(0)	6(1.9)
32	Hypertension can lead to death.	179(57.7)	92(29.3)	40(12.7)	0(0)	3(1)

33	Hypertension can affect your sleep pattern.	149(47.5)	75(23.9)	86(27.4)	0(0)	4(1.3)
	Hypertension can affect your libido/sexual performance.	203(64.6)	22(7.0)	83(26.5)	0(0)	6(1.9)
	Total	2938	1181	527	145	233
	Mean (%)	183.6(58.5)	73.8(23.5)	32.9(10.5)	9.1(2.9)	14.6(4.6)

Over 65% of participants agreed that regular checking of blood pressure was important, and over 70% agreed that regular exercise is important to live a healthy life.

**Table 4:** Practices regarding hypertension

s/n	variables	Always N/%	Sometimes N/%	Never N/%
34	Do you check your blood pressure regularly?	53(16.9)	95(30.3)	166(52.9)
35	Do you eat healthy food?	46(14.6)	221(70.4)	47(15)
36	Do you visit your healthcare provider regularly?	32(10.2)	191(60.8)	89(28.3)
37	Do you add extra salt to your food daily?	9(2.9)	48(15.3)	257(81.8)
38	Do you exercise regularly?	17(5.4)	41(15.6)	256(81.5)
39	Do you take your medications regularly as prescribed for you?	199(63.4)	115(36.6)	0(0)
40	Do you have ready access to your drugs?	304(96.8)	10(3.2)	0(0)
41	Do you miss taking your drugs occasionally?	7(2.2)	307(97.8)	0(0)
42	Do you experience side effects when taking your drugs?	7(2.2)	247(78.7)	60(19.1)
43	Do you take herbal drugs as well?	118(37.6)	196(62.4)	0(0)
44	Do you take supplements as well?	137(43.6)	157(50)	20(6.4)
45	Do you smoke?	23(7.3)	32(10.2)	259(82.5)
46	Do you drink alcohol?	36(11.5)	138(43.9)	140(44.6)
	Total	990	1798	1294
	Mean (%)	76.2 (24.3)	138.3 (44.0)	99.5 (31.7)

About 63% of participants reported that reported that they always take their medications as prescribed, and 96.8% reported that they readily have access to their medications.

### Hypotheses

The following hypothesis was tested in this study, Null hypothesis (Ho): there is no significant correlation between age and knowledge of hypertension.

**Table 5:** Correlation between age and KAP regarding hypertension

Variables	r-value	p-value	Interpretation
Age and Knowledge	-0.085	0.131	No correlation

\*Sig. at 95% CI

Pearson's two-tailed test was used to test for the correlation between age and knowledge, a P-value of 0.131 was obtained, indicating no significant correlation.

### Discussion

In terms of demographics, 29% of the respondents were aged 18-25; 50.6% were females; the majority

had secondary school education; 43.3% were single (unmarried). Findings from this study showed that 15.3% of respondents were known hypertensives; this is similar to the findings of Ismail et. al. (2015), which reported 15.0% prevalence rate of hypertension in the Amassoma community of Southern Ijaw, Bayelsa State. The results of this study showed that respondents had good knowledge about high blood pressure. This may be because the majority of respondents received information about high blood pressure from various aspects of hypertension among respondents, however, this information is inconsistent with the results of other previous studies (Mahajan, et. al., 2012). The areas in which the majority of respondents were able to answer accurately were risk factors for hypertension, respondents need good knowledge of risk factors of hypertension to enable them to avoid such risk factors and possibly prevent hypertension, from our study 63.4 % of the study population responded they know alcohol, being overweight (53.3%) and a diet high in salt (56.7%) are risk factors of hypertension, this was also consistent with study by (Adulaziz et al 2017). Respondents in this study appeared to have good attitudes toward preventing, managing, and treating hypertension because they believed that regular

checking of high blood pressure is good, this was consistent with the study by (Sabouhi et al 2011). Having a positive attitude towards the prevention and management of hypertension is very important in health care, and from this study, a majority of respondents responded positively that reduction of salt will prevent hypertension (47.1%), regular checking of blood pressure is good (68.2%), smoking should be avoided (67.5%), and drinking of alcohol should be avoided (68.2%). A Majority (39.2%) of the respondents also agreed that hypertension cannot be cured, which shows that a majority of the community respondents are aware that HTN cannot be cured but managed, this can be compared to similar work by (Adulaziz et. al., 2017)

The majority of the respondents (52.2%) of respondents do not check their blood pressure similar to the findings of (Rahman, et. al., 2015) this shows that a lot of undiagnosed hypertensive cases might be among the respondents; this leaves room for future studies. The majority (70.4%) said they sometimes eat healthy food, the study area is a rural area where the majority of people cannot afford healthy food (a balanced diet) regularly, which can affect their health, government reforms, and good initiatives can help tackle this problem. The majority (60.8%) of the respondents said they sometimes visit their health care provider, this might be that they visit their health care provider only when they are sick, (81.8%) said they never put extra salt in their daily meals, salt is a culprit in the increase in high blood pressure so avoiding extra salt in food is the best choice of action, (78.7 %) responded that they exercise sometimes and exercise is very important in the prevention of hypertension as well as management. Unhealthy foods, lack of exercise, and extra salt intake are all risk factors for hypertension (WHO 2018). The majority of hypertensive respondents responded that they take their drugs regularly (63.8%), that they have ready access to their drugs (96.8 %), that they sometimes miss taking their drugs (97.9%), that they experience side effects of hypertensive drugs from time to time (78.7%) this shows that majority of hypertensive respondents have good compliance and medication management.

The current study found there was no correlation between age and knowledge, this implies that age did not affect the knowledge of the respondents regarding hypertension. Age was not a determinant of knowledge about hypertension in this study.

## Conclusion

The study found a relatively moderate prevalence of HTN and an acceptable level of KAP regarding hypertension among the study population. There was no correlation between age and knowledge. Further effective health education programs need to be carried out to improve the awareness and knowledge of the community regarding hypertension so that further complications of the disease can be prevented.

## Recommendation

Based on the findings of the study, recommendations have options for further practical interventions and corrective measures to improve health services delivery performance and to achieve the goal of public health practices, the following recommendations can be utilized.

The government should continue sponsoring intensive health promotion and education campaigns on HTN awareness and prevention through various mass media channels.

Health workers in partnership with NGOs should carry out outreach programs to the village and other villages, providing education on Hypertension prevention, diagnosis, and treatment.

Further studies should be conducted to identify and address the contrast that prevents people from translating their knowledge into practice regarding Hypertension.

## Study Limitations

The limitation of this study was its setting which is in a small community and dealt with a small population, while our results are promising, we recommended a larger survey and massive testing to broadly portray the current situation and suggest possible ways for lasting improvements in hypertension control and awareness.

## Contributions to Knowledge

This study gave information about the prevalence, knowledge, attitude, and practice of Famgbe Community Yenagoa, Bayelsa State which is a rural setting and this knowledge can be used to know the problems that the community is facing as regards hypertension and can be used in health education and promotion in the Community to help improve their health practices and can also be used for nearby communities to improve their health on hypertension.

## Conflict of interest

There was no conflict of interest among the authors.

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