

## AWARENESS, KNOWLEDGE AND ATTITUDE OF HYPERTENSION AMONG FEMALE PATIENTS RECEIVING HEALTHCARE IN A TERTIARY HEALTH INSTITUTION IN SOUTH-EAST, NIGERIA

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### Abstract

*Cardiovascular diseases (CVD) such as hypertension are well established as a leading contributor to the burden of disease in low income and middle-income countries. An estimated 16.7 million, or 29.2% of total global deaths, result from the various forms of cardiovascular disease, many of which are preventable by action on the major primary risk factors: unhealthy diet, physical inactivity and smoking. Awareness, knowledge and attitude about hypertension have been indicated to influence practice of healthy lifestyle which has implications for hypertension prevention and control. This study aims at examining the female patients in Nnamdi Azikiwe University Teaching Hospital on their awareness, knowledge and attitude towards Hypertension prevention and control. The research design adopted was descriptive survey and balloting sampling technique was used to select 86 respondents. The instrument for data collection was a self-structured, validated questionnaire that contains 12 items. One hundred and thirty (130) questionnaires were administered. Tables and graphs were used for presentation of data. This study revealed that most of the respondents were within the age of 56-65 years. Also, most of the respondents were complete house wife and went to secondary school. Majority of the respondents were Christians. Findings also showed that respondents were highly aware of hypertension. Also, our study observed that respondents are highly knowledgeable about the meaning, causes, complications, the possible risk factors of hypertension and ways in which hypertension can be prevented. Lastly, this study revealed that the respondents' attitude towards preventing hypertension, regular check of blood pressure and regular exercises as a means of hypertension prevention are positive. In conclusion, it was recommended that there is need for more encouragement to prevent relentlessness of respondents on hypertension prevention and control.*

**Keywords:** Hypertension, Prevention, female patients, attitude.

### Introduction

Cardiovascular diseases (CVD) such as hypertension are well established as a leading contributor to the burden of disease in low income and middle-income countries. In a recent study by Saju, et al. (2020) the prevalence of hypertension was 43% and it was slightly higher in women than men (43.7% vs. 41.4%). The myth about hypertension in developing countries (Osuala, et al. 2014) where people still believe that "hypertension is attack from the enemy! (Osuala et al.2016); may be a contributory factor. An estimated 16.7 million, or 29.2% of total global deaths, result from the various forms of cardiovascular disease, many of which are preventable by action on the major primary risk factors: unhealthy diet, physical inactivity and smoking. Hypertension is one of the most important modifiable risk factors for cardiovascular diseases.

There is no doubt that knowledge and attitudes of patients have impact on the management of their illnesses, and improving knowledge is known to improve compliance with treatment (Busari, Olarewaju, Desalu, Opadijo 2010). Awareness, knowledge and attitude about hypertension have been indicated to influence practice of healthy lifestyle which has implications for hypertension prevention and control (Osuala, 2017). Men in the general population have higher diastolic blood pressures than women at all ages and also have a

higher prevalence of hypertension overall. Although men have a higher incidence of total cardiovascular end points at all ages, hypertensive men and women develop strokes, left ventricular hypertrophy, and renal dysfunction at similar rates.

During the fifth decade of women's life, the prevalence of hypertension in women exceeds that of men. In women older than 75years, the prevalence of hypertension is 75%. Ekwunife (2010) also reported that 575 adults out of 2852 adult medical admission in Benin were as a result of high blood pressure related morbidities. Assessment of Hypertension is particularly important in women because it is a modifiable risk factor that is extremely prevalent in older women (August & Oparil, 2013). Therefore, the researchers try to ascertain the awareness, knowledge, and attitude to hypertension prevention among female patients in Nnamdi Azikiwe University Teaching Hospital, Nnewi, Anambra State, South-East Nigeria.

### Objectives of the study

1. To determine the awareness of female patients in Nnamdi Azikiwe University Teaching Hospital, Nnewi to hypertension prevention.
2. To assess the knowledge of female patients in Nnamdi Azikiwe University Teaching Hospital, Nnewi to hypertension prevention.

- To identify the attitude of female patients in Nnamdi Azikiwe University Teaching Hospital, Nnewi to hypertension prevention.

**METHODOLOGY**

The research design used for this research study is the descriptive Survey design. The area of the study is the Nnamdi Azikiwe University Teaching Hospital, Nnewi in Okpuno Nnewichi Nnewi in Nnewi North Local Government Area, Anambra State of Nigeria. This study includes all female patients from age 18 and above irrespective of their religion, marital status, economic status and culture who are present in the hospital and receiving treatment and must not be unconscious or mentally impaired. The following facilities were used for the study: Female Surgical Ward (FSW); Female Medical Ward (FMW); Accident and Emergency; General Outpatient Department (GOPD); Heart to Heart Clinic (HHC); Ante-natal Clinic (ANC); Gynaecological/Obstetrics Clinic (GOC) and Lying-in-Ward.

**Table 1:** Name of facilities and Number of Patients

S/N	Ward/Clinics	Number of female patients
1.	Accident and Emergency Unit	10
2.	Antenatal Clinic (ANC)	19
3.	Female Medical Ward (FMW)	20
4.	Female Surgical Ward (FSW)	26
5.	General Outpatient Department (GOPD)	50
6.	Gynaecological/Obstetrics Clinic (GOC)	16
7.	Heart to Heart Clinic (HHC)	20
8.	Lying-in-Ward	31
		192

A sample size of 130 patients was drawn statistically using “Taro Yamane” formulae for a finite population (Yamane, 1973) and 130 was randomly selected by balloting. The instrument for data collection was a validated self-structured, close ended questionnaire with reliability coefficient of 0.78 was used to assess awareness, level of knowledge of cause and risk factors of hypertension as well as attitude to prevention and control. it was divided into three sections. Section A is on personal data, section B, on knowledge and section C, on attitude towards hypertension prevention. Ethical consideration was observed by getting the individual consent of the respondents. It was also ensured that confidentiality, privacy and respect for the dignities of the female patient’s despondence were all maintained. Anonymity was maintained. The respondents were allowed to participate willingly and their consents were

obtained prior to administration of the questionnaire by use of consent forms. They voluntarily filled the questionnaires. Eight-six (86) questionnaires were administered and 71 were collected. Descriptive analysis of data was statistically done using SPSS Version 20. Results were presented in tables and charts.

**RESULTS**

From Table 1, 2% were within the age of 19-25, 5% were within 26-35 years, 9% were within 36-45 years, 14% were within 46-55 years, 35% were within 56-65 years, 19% were within 66-75 years while 15% were < 75. Also, 5% of the respondents were students, 46% were complete house wife, 31% were traders, 9% were artisans while 9% were civil servants. 8% of the respondents have no formal education, 34% only went to primary school, 45% went to secondary school while 14% went to the tertiary institution. 8% of the respondents were single, 75% were married while 17% were widowed. 95% of the respondents were Christians while 5% were Muslims. This study revealed that all the respondents were females and most of them were within the age of 56-65 years. Also, most of the respondents were complete house wife attended secondary school. Majority of the respondents were Christians.

**Table 2:** Demographic data of the respondents

Variable	Category	N	
Age	19-25	3 (2)	
	26-35	7 (5)	
	36-45	11 (9)	
	46-55	18 (14)	
	56-65	46(35)	
	66-75	25(19)	
	< 75	20 (15)	
	<b>Total</b>	<b>130 (100)</b>	
Occupation	Student	7 (5)	
	Complete house wife	60 (46)	
	Trader	40 (31)	
	Artisan	11 (9)	
	Civil Servant	12 (9)	
		<b>Total</b>	<b>130 (100)</b>
Educational Status	Non formal	10 (8)	
	Primary	44 (34)	
	Secondary	58(45)	
	Tertiary	18 (14)	
Marital Status		<b>Total</b>	<b>130 (100)</b>
	Single	6(8)	
	Married	106(75)	
	Widowed	24(17)	
		<b>Total</b>	<b>130 (100)</b>
Religion	Christianity	124(95)	
	Muslim	6(5)	
		<b>Total</b>	<b>130(100)</b>

**Objective one**

To determine the awareness of female patients in receiving healthcare in Nnamdi Azikiwe University Teaching Hospital, Nnewi to hypertension prevention.

As presented in Table 3, 2 (1.5%) of the respondent claimed that he has never heard of the term hypertension while majority 128 (98.5%) of the respondents reported that they have heard of the term hypertension. In summary, respondents are highly aware of hypertension.

Table 3: Respondents level of awareness of hypertension

Statement	Responses	N	%
Have you heard about the term “hypertension”	Yes	128	98.5
	No	2	1.5
	Total	130	100

**Objective two**

To assess the knowledge of female patients in Nnamdi Azikiwe University Teaching Hospital, Nnewi to hypertension prevention.

Results in Table 4 showed that 67% of the respondents know hypertension as a “silent killer”, 65% of the respondents know it as thinker’s disease, 51% of the respondents know it is a spiritual attack, 76% of the respondents know hypertension as elevation in blood pressure above 140/90mmHg. In conclusion the respondents are knowledgeable about the definition of hypertension. (65%)

Findings also revealed that (55%) of the respondents know that hypertension can be cause by hereditary, 55% said it can be caused by continuous intake of oral contraceptives, 77% know it is caused by obesity, 57% of the respondents stated that it can be caused by stressful conditions and excessive thinking while 65% know that it has no cause. This study observes that the respondents are knowledgeable about the causes of hypertension (65%).

Table 3: Respondents knowledge of hypertension

S/N	Statement	Responses	YES	NO
1	In your understanding, what do understand by term “hypertension?”			
		Silent killer	87(67%)	43(33%)
		Thinker’s Disease	84(65%)	46(35%)
		Spiritual attack	66(51%)	64(49%)
		A persistent elevation of Blood pres above 140/80mmhg	99(76%)	31(24%)
	<b>Sub Total</b>		<b>65%</b>	<b>35%</b>
2	Causes of hypertension?	Hereditary	71(55%)	59(45%)

The result of this study also observed that 69% of the respondents said that possible risk factors of hypertension is age, 77% of the respondents claimed that constant emotional distress is a possible risk factor of hypertension, 88% of the respondents said that high intake of salt in diet is also a possible risk factor of hypertension, 55% of the respondents said that lack of exercise is a possible risk factor of hypertension, 65% of the respondents reported that menopause is a possible risk factor of hypertension. In summary, respondents are highly knowledgeable about the possible risk factors of hypertension (57%).

This study report that 67% of the respondents said that hypertension can be prevented through Regular checking of blood, 66% of the respondents said Weight Reduction, 79% of the respondents said through Reduced intake of salt, 82% of the respondents said through Avoidance of oral contraceptives, 85% of the respondents said through Decreasing intake of foods high in cholesterol and lastly, 89% of the respondents said none of the mentioned This study implies that the respondents’ knowledge on prevention is high (67%).

Further, figure 1 shows respondents knowledge of complications of hypertension, 77.5% of the respondents said that stroke is one of the effects of uncontrolled hypertension, 2.8% of the respondents said that blindness is one of effect of uncontrolled hypertension, 8.5% of the respondents said that heart failure is one of the effects of uncontrolled hypertension 4.2% of the respondents said that kidney diseases is one of the effects of uncontrolled hypertension, 7.0% of the respondents said that cardiac arrest is one of the effects of uncontrolled hypertension. This study report that the respondents are knowledgeable about the complications of hypertension. In summary, this result concludes that the respondents are very knowledgeable about hypertension (63%).

		Continuous intake of oral Contraceptives	72(55%)	58(45%)
		Overweight and obesity	100(77%)	30(23%)
		Thinking too much / Stressful conditions	74(57%)	56(43%)
		It has no cause	85(65%)	45(35%)
	<b>Sub Total</b>		<b>68%</b>	<b>32%</b>
3	What are the possible risk factors of hypertension?	Age	89(69%)	41 (%)
		Constant emotional distress	100(77%)	30(23%)
		High intake of salt in diet	114(88%)	16(12%)
		Lack of exercises	72(55%)	58 (45%)
		Menopause	84(65%)	46(35%)
	<b>Sub Total</b>		<b>57%</b>	<b>43%</b>
	knowledge on ways in which hypertension can be prevented			
		Regular checking of blood pressure in the nearest health center	75(58%)	55(%)
		Weight Reduction	86(66%)	44(34%)
		Reduced intake of salt	102(79%)	28(21%)
		Avoidance of oral contraceptives	107(82%)	23(18%)
		Decreasing intake of foods high in cholesterol	111(85%)	19(15%)
		None of the above	115(89%)	15(11%)
			<b>67%</b>	<b>33%</b>
	<b>Total</b>		<b>63%</b>	<b>37%</b>

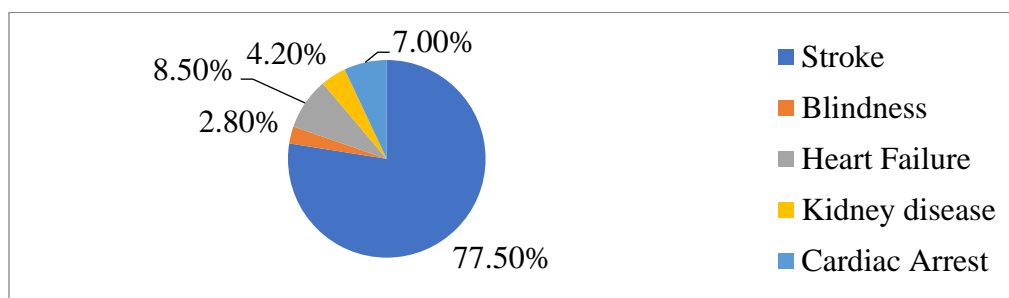


Fig 1: Respondents knowledge on complications of hypertension

**Objective three**

To identify the attitude of female patients in Nnamdi Azikiwe University Teaching Hospital, Nnewi to hypertension prevention.

This study report that 42% of the respondents agree strongly that regular check of blood pressure will prevent and control hypertension while 19% agree, 17% disagree and 22%. 55% of the respondents agree strongly that hypertension can be prevented by weight reduction while 24% agree, 6% disagree and 12% strongly disagreed. This study also showed that 25% of the respondents agree strongly that reduced intake of salt in diet can help prevent hypertension while 35% agree, 17% disagree and 22%. strongly disagreed. 22%

of the respondents agree strongly that avoidance of oral contraceptives will help prevent hypertension while 15% agree, 12% disagree and 52%. strongly disagreed. 75% of the respondents agree strongly that reduced intake of foods high in cholesterol can help prevent hypertension while 12% agree, 8% disagree and 5%. strongly disagreed. 54% of the respondents agree strongly that doing regular exercise daily can help prevent hypertension, while 17% agree, 14% disagree and 15%. strongly disagreed. 37% of the respondents agree strongly that that reduced intake of foods high in cholesterol can help prevent hypertension. While 27% agree, 22% disagree and 15%. strongly disagreed. This study implies that the respondents' attitude towards is positive (66%).

**Table 4:** Respondents attitude on high blood pressure prevention

Responses	SA	A	D	SD
I check my blood pressure regularly	55(42%)	25(19%)	22(17%)	28(22%)
hypertension can be prevented by weight reduction	71(55%)	35(27%)	8(6%)	16(12%)
reduced intake of salt in diet can help prevent hypertension,	33(25%)	46(35%)	22(17%)	29(22%)
avoidance of oral contraceptives will help prevent hypertension	28 (22%)	19 (15%)	15(12%)	68(52%)
reduced intake of foods high in cholesterol can help prevent hypertension	98(75%)	16(12%)	10(8%)	6(5%)
I do regular exercise daily	70(54%)	22(17%)	18(14%)	20(15%)
reduced intake of foods high in cholesterol can help prevent hypertension	48 (37%)	35 (27%)	28 (22%)	19 (15%)
<b>TOTAL</b>	<b>44</b>	<b>22</b>	<b>12</b>	<b>20</b>

## DISCUSSION

This study assesses the awareness, knowledge, and attitude to hypertension prevention among female patients in Nnamdi Azikiwe University Teaching Hospital, Nnewi, Anambra State, South East Nigeria. The sociodemographic characteristics of respondents revealed that all the respondents were females and most of them were within the age of 56-65 years. Also, most of the respondents were complete house wife attended secondary school. Majority of the respondents were Christians.

This study showed that respondents are highly aware of hypertension. This study agrees with Musinguzi and Nuwala (2013) who said that awareness of hypertension was higher among females compared to males. It also corresponds with the studies carried out by Nnaji (2007) and Osuala (2014) which stated that most of the adult patients have heard about hypertension. This study is in contrast to the study by Saju et al. (2020) who observed that 78% of their respondents are not aware of hypertension.

Our study observed that respondents are knowledgeable about the meaning, causes, complications, the possible risk factors of hypertension and ways in which hypertension can be prevented. This study is in sharp contrast to the findings of Davidson and Gellios (2003) who stated that their respondents are less knowledgeable by reporting that thinking has less to do with hypertension and therefore not defined as thinker's disease. This study also corresponds with the research by Oliveria (2005) which stated that although general knowledge and awareness of hypertension is adequate, patient do not have a comprehensive understanding of this condition. The researchers perceived that the high level of the knowledge of hypertension may be because it is becoming a house hold name in Nigeria. The findings of this study also negate Amzat (2011) who found inadequate knowledge about the risk factors associated with hypertension among the sample studied.

This study revealed that the respondents' attitude towards preventing hypertension is positive. Busari, Olanrewaju, Desalu, Opadijo et al, (2010) believed that knowledge and attitudes of patients have impact on the management of their illnesses and Osuala, (2017) posited that improving knowledge and attitude is known to improve compliance with treatment

## CONCLUSION AND RECOMMENDATIONS

There was adequate knowledge and perception of hypertension among the respondents. The study has demonstrated that the majority of the respondents had a good level of awareness, knowledge and attitude towards hypertension prevention. There is need for increased encouragement on the benefits of hypertension prevention and control such as regular blood pressure screening and DASH diet, through outreaches to promote health seeking behaviour of mothers for early diagnosis, prevention and control of hypertension (Osuala, 2018). The role of mothers in lifestyle modification which is the bed rock for hypertension prevention and control cannot be over emphasized. There is also need for improved teaching skills among midwives and other teachers through Mandatory Continuing Professional Development Programmes to scale up awareness campaign on hypertension prevention and control. Additional, Public Health Nurses should be involved in population focus interventions and policies on hypertension prevention and control to showcase their expertise.

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