

Journal of Critical Care Research and Emergency Medicine

The Prevalence of Hypertension and Awareness of its Associated Risk Factors Among Electronic News Media Workers in Owerri, Imo State

Nwanyaka Henry Ifeanyi* and Okemma Elizabeth Uwaezu

Department of Public Health, Faculty of Health Science, Imo State University Owerri

*Corresponding author: Nwanyaka Henry Ifeanyi, Department of Public Health, Faculty of Health Science, Imo State University Owerri.

Submitted: 27 November 2023 Accepted: 04 December 2023 Published: 11 December 2023

Citation: Nwanyaka Henry Ifeanyi and Okemma Elizabeth Uwaezu (2023) The prevalence of Hypertension and Awareness of its Associated Risk Factors Among Electronic News Media Workers in Owerri, Imo State. J Cri Res & Eme Med 2(3), 01-14.

Abstract

The elevated incidence of hypertension and its heart-related consequences in Nigeria have been linked to a host of largely avoidable risk factors. Because of their line of work and amount of exposure, people who work in the electronic media are not immune to the prevalence of hypertension and associated risk factors. Therefore, the Owerri metropolitan area should look into these issues. A modified version of the WHO STEPwise instrument, which consists of a questionnaire component and blood pressure measurement, was utilized in this descriptive cross-sectional study design. To assess the validity and reliability of the instrument, pilot tests were conducted. The chi squared test (p-value) was used to analyze the statistical data from the 338 respondents that made up the study sample. In Nigeria, the prevalence of hypertension and associated cardiovascular problems is rising. A range of SPSS tools were used to show the data in tabular and narrative formats. An odd ratio of 95% was employed to assess the association between sociodemographic characteristics and hypertension. The frequency was found to be 15.3%, with higher rates among men, the elderly, those who work more than eight hours a day, and those who have worked for more than five years. The results of the chi square test showed that the data have a statistically significant positive correlation and association. Among the problems identified are alcohol consumption (42.9%), overweight (41.9%), sedentarism (38.9%), obesity (19.7%), and a bad attitude regarding hypertension (18.7%). Yet, the prevalence of hypertension will decrease with regular checks with the doctor and health education regarding a healthy lifestyle.

Keywords: Prevalence, Hypertension, Awareness, Electronic News Media Workers, Owerri

Introduction

Hypertension is a major risk factor for cardiovascular disease. Because it is not widely recognized or treated, this has resulted in an increase in the death and morbidity caused by uncontrolled hypertension. [1]. Emerging epidemiological data from sub-Saharan Africa indicate that hypertension has become a significant public health concern in the region due to a lack of knowledge, poor diagnosis, and low living standards. It is currently a major non-infectious disease that is threatening the region and other developing countries, with Nigeria having a high prevalence of hypertension [2]. To guide the appropriate preventative actions, however, a better assessment of the present burden of hypertension—including awareness, treatment, and control—is required [3].

Nonetheless, "In medical terms, hypertension is a blood pressure of 140/90 mmHg (millimeters of mercury) or more, based on at least two readings on separate occasions," according to other authorities, who have defined hypertension as an increase in blood pressure [4]. There are two fundamental types of hypertension in humans: essential and primary. The former occurs when the source of the ailment is unknown. This specific type

of hypertension can be controlled but not cured. The most common type of hypertension affects almost 90% of those who have it. It is plausible that the development of essential hypertension is significantly influenced by a hereditary factor. Hypertension resulting from an underlying illness or disease process is referred to as secondary hypertension. Merely 10% of individuals experience secondary hypertension, which can be attributed to a co-morbid disease or a recognized medical condition that raises blood pressure. Renal failure resulting from severe chronic kidney disease or renovascular disease is the most common secondary cause in these patients; thyrotoxicosis, primary hyperal-dosteronism, and aortic coarctation are other secondary causes.

Genetics or a strong family history is one of the associated risk factors for hypertension, along with other factors like aging, obesity, smoking, using tobacco, diabetes mellitus, eating a diet high in salt and saturated fats, living a sedentary lifestyle, dealing with stress on a daily basis, getting little sleep, and becoming pregnant [5].

The risk of cardiovascular disease associated with elevated blood pressure is determined by the interaction of several risk factors in an individual, most of which are related to the individ-

Page No: 01 www.mkscienceset.com J Cri Res & Eme Med 2023

ual's lifestyle, such as the food we eat and occasionally whether there have been cases of high blood pressure in the family line, the effects of heart diseases, and blood vessel problems.

Most of the risky behaviors that have been linked to HBP in this setting are processed food consumption, inactivity, and the presence of environmental stressors.

It was discovered that elderly and obese individuals had higher rates of hypertension, accounting for 27.8% of government workers. Blood sugar and blood pressure have a tight relationship (6).

The global burden of non-communicable diseases (NCDs), including hypertension, is rapidly expanding, with the African continent looking to be the most severely affected. Because of its enormous population—roughly 170 million people as of right now—Nigeria bears a significant portion of the burden of hypertension on the continent [7].

Both the prevalence and overall burden of hypertension are rising globally, especially in low- and middle-income countries, according to Mills, Stefanescu, and He (2020). The consequences of the illness have also made it harder for people to work. Hypertension is the cause of 51% of deaths from cerebrovascular illness and 45% from ischemic heart disease [8].

The global awareness, management, and control of hypertension are still far too low, particularly in low- and middle-income countries [9].

Employees face a range of pressures at work when they perform their duties. Stress-related physical and psychological reactions to the workplace can lead to health issues, especially hypertension. Electronic media workers are not immune to stress; in addition, they frequently overwork themselves to keep up with the digital world, have irregular sleep patterns, are chronically drunk, smoke, and use other stimulants that force them to work without rest periods. These conditions can cause sudden collapse, myocardial infarction (heart attack), stroke, or cerebrovascular accidents (stroke), all of which are associated with an increased risk of undiagnosed hypertension. The risk of hypertension has a major influence on their ability to work, and when problems develop, it has an impact on their socioeconomic status [10]. The purpose of this study is to create a baseline understanding of hypertension's prevalence and awareness among Owerri, Nigeria's electronic media professionals.

Material and Methods Research Design

This study employed a descriptive cross-sectional study design to examine the sociodemographic and risk factor variables for hypertension among electronic media professionals in Owerri.

Study Area

The area of study Imo state's capital, Owerri, is located in the southeast of Nigeria. It is located at Lat: 5° 28' 34.7160" N and Long: 7° 1' 33.0708" E, in an equidistant point between the states of Abia, Rivers, and Anambra. It has a population of 1.402 million and a 65 km2 area [11]. The Owerri Municipal, Owerri West, and Owerri North are Owerri's three local gov-

ernments. Igbo and English are the two main languages spoken by the populace. With a large variety of unique hotels, restaurants, and lounges where people can unwind, drink, and eat food of various kinds, Owerri is known as the eastern heartland and the home of hospitality and entertainment. The populace also works in other business and governmental sectors. Owerri, which is known for its entertainment, has a large number of radio and television stations. This analysis includes all radio and television stations in the Owerri West and municipal government districts. Both publicly and privately held stations are among them.

Population of Study

This comprised all 690 radio and television station employees in Owerri, Imo State, ranging in age from 18 to 65. They consist of 239 television station employees and 451 radio station employees, as well as administrative, journalistic, and other staff with a range of educational backgrounds. All full-time station employees who spend the majority of their working hours at the station will be included in the study sample. Part-time employees and freelancers were not included.

Sampling Technique

338 people from a total population of 690 radio and television station employees in Owerri, Imo State, participated in the study's sample. The combined workforce of the five radio stations was 451 (65%), while the workforce of the three television stations was 239 (35%).

The stratified random sample technique was used to choose the respondents from the eight stations. One federal, one state, and one privately held station were chosen by simple random sampling from each stratum of radio or television stations. The six chosen stations were sampled in proportion to their share of the population as a whole. The participant was given a letter from the department of public health, and the respondent's informed consent was obtained.

By using basic random selection, the responders from each station were chosen. In a container, equal amounts of folded papers with Yes and No were placed. The people who checked the Yes box in the container were chosen, and questionnaires were given to them. BOSS 98.9 FM, = 32 (9.5%), HOT FM 99.5, = 15 (4.4%), and IBC - Orient 94.5, = 182 (53.8%), are calculated based on this. Television stations include NTA = 25 (7.4%), Orient tv-59 = 81 (24%), and Zanders TV = 3 (0.89%)

Instrument for Data Collection

A self-administered structured questionnaire with closed-ended questions, a sphygmomanometer (used to assess blood pressure), and a stadiometer were among the tools used to conduct the study (anthropometry).

The STEPwise methodology created by the World Health Organization for examining non-communicable diseases was borrowed by the study. The instrument is divided into three sections that gather information on the sociodemographic traits, physical measurements, and blood pressure test of a subject.

Participants' sociodemographic information and anthropometric measurements, including height, weight, blood pressure, and body mass index, were collected. Using a stadiometer, the

Page No: 02 www.mkscienceset.com J Cri Res & Eme Med 2023

respondents' height and weight were determined. Since height and weight were known, the usual formula [(weight/height2) x 100/1)] in kg/m2 was used to determine each respondent's body mass index. Following that, BMI is categorized into various groups in accordance with WHO recommendations.

Determination of Blood Pressure

A typical cuff sphygmomanometer was used to take three consecutive blood pressure readings at intervals of five minutes, and the average reading was calculated to ascertain the respondent's blood pressure. Both the systolic and diastolic blood pressures were measured. The WHO/ISH criterion was used to define the participants as hypertensive or not. A 140/90 mmHg blood pressure result for any respondent was classed as hypertension.

The questionnaires were given out by two research assistants (nurses) who had already received training in taking blood pressure readings. Before data collection began, I gave the study assistants further training and tested their skills

Validity of Instrument

Both a lecturer at Madonna University, Elele, and public health lecturers at Imo State University's Department of Public Health validated the study tool.

Reliability of Instrument

In order to assess the reliability, a pilot study was conducted. Media professionals at one radio station were given 10 copies of the questionnaire, which was then given to them again two days later with a new questionnaire.

The correlation coefficient between the two sets of results was 0.85. This suggested that it was trustworthy.

Data Analysis

Data was gathered and input into an Excel spreadsheet. The data on continuous variables were summed using the mean and standard deviation. For analysis, it was then imported into SPSS version 20.0 (Statistical Program for Social Sciences).

To ascertain the relationship between various factors and hypertension, chi-square and logistic regression were used. A p-value of 0.05 or less was regarded as statistically significant for all statistical tests.

The data were presented in tables and a graph with frequency distributions and percentages.

Ethical Consideration

The Imo State University's public health department's research and ethics committee was contacted for approval, which it granted. Also, the general managers and administrative chiefs of the several stations were asked for and given authorization. In the field, before recruiting volunteers for the study, I got their verbal informed consent. To protect the respondents' privacy, names and addresses were withheld.

Results

Presentation and Analysis of Data

The study's findings on the prevalence of hypertension and risk factors among Owerri's electronic media professionals are summarized below. Male and female full-time employees of the chosen radio and television stations in Owerri are participants.

338 questionnaires in all were given out and returned. Yet 320 of them were accurately filled out and examined. This results in a 94.6% response rate.

Table 1: Socio-Demographic/Job distribution

Variables	Frequency	Percentage							
	Sex (n=320)								
Male	171	53.4							
Female	149	46.6							
	Age								
18-33 years	71	22.2							
34-48 years	208	65.0							
49-62years	41	12.8							
	Educational Level								
Secondary	48	5.0							
Tertiary	271	85.0							
	Marital Status								
Single	106	33.2							
Married	208	65.2							
Separated	5	128							
	Job Description								
Administration	128	40.0							
Journalists	13	41.3							
Others	60	18.7							

Time at Work							
6-8 hours	6-8 hours 263 8						
8-12 hours	8-12 hours 57						
	Years on Present Job						
0-5 years	44.0						
6-10 years	50.0						
Above 10 years	19	5.9					

According to Table 1 above, which details the sociodemographic characteristics of the respondents, 171 (53.4%) of them were men, and 149 (46.6%) were women. The ages of all responders ranged from 18 to 65. 71 (22.2%) respondents were between the ages of 18 and 30; 208 (65%) were between the ages of 31 and 45; and 41 (12.8%) were between the ages of 46 and 65.

48 people (15%) have completed secondary education, while 271 people (85%) have completed postsecondary education. There were 208 married respondents (65.2%), 106 single respondents (33.2%), and 5 divorced respondents (1.6%).

According to employment descriptions, 132 (41.3%) of respondents work as journalists, 128 (40%) are in the administrative department, and 60 (18.7%) are in other departments. 57 (17.8%) respondents spend between 6 and 8 hours at work, while 263 (82.2%) respondents spend between 6 and 8 hours at work. 57 (17.8%) of the respondents work 8 to 12 hours every day.

141 (44%) respondents have been employed for 0 to 5 years, 160 (50%) have been employed for 6 to 10 years, and 19 (5.9%) have been employed for more than 10 years.

Table 2: Knowledge of Hypertension

Variables	Frequency (n)	Percentage (%)						
	Hypertension is Same as Raised							
Blood pressure? (n=320)								
Yes	319	99.7						
No	1	0.3						
	Hypertension in your Family Increases							
Your risk of hypertension? (n=317)								
Yes	120	37.9						
No	197	62.1						
	Hypertension Drugs are Taken							
For life? (n=314)								
Yes	242	77						
No	72	23						
	Can Uncontrolled Hypertension							
Cause harm? (n=317)								
Yes	305	96.2						
No	12	3.8						
	Too Much Stress Can Cause							
Hypertension (n=313)								
Yes	311	99.4						
No	2	0.6						

Table 2 above shows that 99.7% of respondents were aware that hypertension is the same as elevated blood pressure, with only 0.3% disagreeing.

37.9% of respondents indicated that having a family history of hypertension increased the likelihood of developing it, while 62.1% disagreed.

According to the above table, 77% of respondents agreed that hypertension medications are taken for the rest of their lives, whereas 23% disagreed.

3.8% of respondents disagreed, whereas 96.2% of respondents agreed that uncontrolled hypertension can cause difficulties.

The majority of respondents believe that high levels of stress can lead to hypertension, with 0.6% disagreeing.

Page No: 04 www.mkscienceset.com J Cri Res & Eme Med 2023

Table 3: Attitude Towards Hypertension

Variables	Frequency (n)	Percentage (%)					
Regular BP check (n=316)							
Yes	59	18.7					
No	297	81.3					
	Last time BP was checked (n=315)						
One week ago,	6	1.9					
One month ago,	37	11.7					
2-4 months ago,	76	24.1					
Do not remember	181	57.5					
Never	15	4.8					
	Hypertension status (n=314)						
Yes	18	5.7					
No	296	94.3					
Pre	eferred treatment option if hypertensive (n=2	298)					
Hospital treatment	296	98.0					
Traditional treatment	6 2.0						
Change risky lifestyle to avoid hypertension (n=306)							
Yes	303	99.0					
No	3	1.0					

Regarding the attitude characteristics in Table 3, only 59 respondents (18.7%) have BP checks, compared to 257 (81.3%) who do not.

In terms of frequency, 6 (1.9%) people had their blood pressure tested one week ago, 37 (11.7%) one month ago, 76 (24.1%) two to four months ago, 181 (57.5%) could not recall the last time they had their blood pressure measured, and 15 (4.8%) people had never had one.

Regarding their level of hypertension, 18 individuals (5.7%) reported having it whereas 296 (94.3%) did not.

Regarding treatment alternatives, 292 (98%) chose hospital care while 6 (2%) chose conventional care.
303 people (99%) indicated they would adjust their lifestyle to prevent hypertension, while 3 people (1% claimed they would not) (something must kill a man).

Table 4: Modifiable Risk Factors of Hypertension

Variables	Frequency (n)	Percentage (%)					
Tobacco Smoking (n=320)							
Yes	4	1.3					
No	316	98.7					
	Alcohol Consumption						
Yes	136	42.9					
No	181	57.1					
	Brand of Alcohol						
Gin	17	10.2					
Beer	90	53.9					
Alcoholic wine	60	35.9					
	Duration of Alcohol Consumption						
1-3 years	33	26.0					
4-6 years	34	26.8					
7-10 years	17	13.4					
10 years	43	33.9					
Approximate Daily Unit (quantity) of Alcohol Consumed							
1-2 units (1 bt beer, 1 glass wine, 1 tot gin)	51	45.6					
3-4 units (2 bt beer, 2 glass wine, 2 tot gin)	53	47.3					
4 units (more than above)	8	7.1					

About modifiable risk factors Before Table 4, Only 4 respondents (1.3%) acknowledged to smoking tobacco, compared to 316 (98.7%) who indicated they did not.

Regarding alcohol consumption, 136 (42.9%) of the respondents said they consume a variety of brands, while 181 (57.1%) said

they don't. 33 (26%) of those who drink had been doing so for 1-3 years, 34 (26.8%) for 4-6 years, 17 (13.4%) for 7–10 years, and 43 (33.9%) for more than ten years. On a daily basis, 8 (7.1%) drank 4 or more units of alcohol per day, while 53 (47.3%) drank 2-4 units per day and 51 (45.6%) drank 1-2 units per day.

Table 4.1: Contd. Modifiable Risk Factors for Hypertension

Variables	Frequency (n)	Percentage (%)		
·	Exercise	•		
Yes	195 61.1			
No	124	38.9		
	Type of Exercise			
Walking	94	50.0		
Running/jogging	80	42.6		
Indoors with machine	14	7.4		
	Duration of Exercise			
15-30 minutes	122	67.8		
30-60 minutes	45	25.0		
60-90 minutes	13	7.2		
	No. of Exercise Session			
Once per week	34.6	34.6		
2-3 times	104	56.2		
4 or more times	17	9.2		
	Means of Going to Work			
Trekking	28	8.8		
Bicycle	1	0.3		
Public transport	228	71.7		
Personal car	61	19.2		

195 people (61.1%) reported to exercising, compared to 124 people (38.9%), who do not. 80 (42.6%) people ran or jogged, 94 (50%) people walked, and 14 (7.4%) people used machines indoors. The majority of respondents—122, or 67.8%—work out for 15 to 30 minutes, while 45 respondents—25%—work out for 30 to 60 minutes. 64 (34.6%) of the respondents worked out once per week, 104 (56.2%) worked out

twice or three times per week, and 17 (9.2%) worked out four times or more each week.

28~(8.8%) of the respondents trekked to work, one (0.3% person rides a bicycle to work, and 228~(71.1%) of the respondents used public transportation. 61 people (19.2%) commute to work in their personal vehicles.

Table 4.2: Modifiable Risk Factors of Hypertension (Cont.)

Variables	Frequency (n)	Frequency (n)					
Extra Salt to Meat							
Yes, often	29	9.1					
Yes, occasionally	119	37.5					
No, not	169	53.3					
	Add Cooked Vegetables to Meals						
Yes, daily	53	16.7					
Yes, sometimes	73.0	73.0					
No	32	10.1					
	Fruit Consumption						
Daily	12	3.8					
Weekly	65	20.3					
Not regular	243	7.9					
Not at all	0	0.0					

Page No: 06 www.mkscienceset.com J Cri Res & Eme Med 2023

Regarding salt intake, 169 (53.3%) respondents do not add any additional salt to their meals, 119 (37.5%) add salt occasionally, and 29 (9.1%) respondents frequently add extra salt to their meals.

When asked if they included cooked veggies in their meals, 32 (10.1%) said they did not, 232 (73%) said they occasionally did, and 53 (16.7%) said they did.

Regarding fruit eating, 12 (3.8%) respondents said they ate it every day, 65 (20.3%) said they ate it once a week, and 243 (74.9%) said they didn't eat it often. No respondent acknowledged that they never ate any fruits.

Regarding salt intake, 169 (53.3%) respondents do not add any additional salt to their meals, 119 (37.5%) add salt occasionally, and 29 (9.1%) respondents frequently add extra salt to their meals.

When asked if they included cooked veggies in their meals, 32 (10.1%) said they did not, 232 (73%) said they occasionally did, and 53 (16.7%) said they did.

Regarding fruit eating, 12 (3.8%) respondents said they ate it every day, 65 (20.3%) said they ate it once a week, and 243 (74.9%) said they didn't eat it often. No respondent acknowledged that they never ate any fruits.

Table 5: Body Mass Index (Kg/m²)

Variables	Frequency (n)	Percentage (%)
Underweight (<18.50)	4	1.3
Normal (18.50-24.9)	119	37.1
Overweight (25.0-29.9)	134	41.9
Obese (>30)	63	19.7

Table 5 above shows Body Mass Index (BMI), 4 (1.3%) of the respondents were underweight, 119 (37.1%) normal weight, 134 (41.9%) were overweight and 63 (19.7%) were obese.

Table 6: Prevalence of Hypertension

Variables	Frequency (n)				Percentage (%)	
	Male	Female	Total	Male	Female	Total
Normal	51	68	119	15.9	21.3	37.2
Prehypertension	87	65	152	27.2	20.3	47.5
Hypertension	33	16	49	10.3	5.0	15.3

In Table 6 above, the approximate prevalence of hypertension is displayed. Of the total, 119 (37.2%) have normal blood pressure, 49 (15.3%) have hypertension, and 152 (47.5%) have prehypertension. This yields a rough prevalence of hypertension in the sampled population of 15.3%.

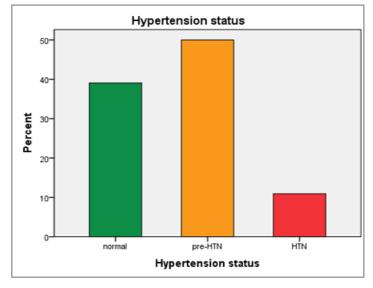


Figure 1: Adjusted Prevalence of Hypertension (10.9%) Example: Incidence rate Figure displays the 10.9% adjusted prevalence (incidence) for hypertension. This represents the number of people whose hypertension was discovered after they were unaware of it.

Page No: 07 www.mkscienceset.com J Cri Res & Eme Med 2023

Table 7: Chi-square test of independence to determine association (p<0.05) between risk factors and hypertension

Varia	Variable		Hypertension Category			Chi-Square Test		
		Normal	Pre-HTN	HTN	Df	\mathbf{X}^2	p-value	
	Mala	51	87	25				
Sex	Male	16.7%	28.4%	8.2%				
SeA	Female	67	64	12	2	8.972	0.011*	
		21.9%	20.9%	3.9%				
	15.20	42	26	3				
	15-30 years	13.7%	8.5%	1.0%				
Age	31-45 years	68	113	24				
		22.2%	36.9%	7.8%	4	29.554	0.000*	
	16.65	8	12	10				
	46-65 years	2.6%	3.9%	3.3%				
	Secondary	18	24	4				
	·	5.9%	7.9%	1.3%				
Education Level	T:	100	126	33	2	0.628	0.746	
	Tertiary	32.8%	41.3%	10.8%				
	Single	57	45	3				
	Ü	18.7%	14.8%	1.0%				
3.5 1.10	Married	60	103	33				
Marital Status		19.7%	33.8%	10.8%	4	25.030	0.000*	
	Separated	1	2	1				
		0.3%	0.7%	0.3%				
	Admin	41	70	13				
		13.4%	22.9%	4.2%				
Job Description	Journalist	57	49	17	4	7.615	0.106	
1	U OULTIULISE	18.6%	16.0%	5.6%				
	0.1	20	32	7				
	Others	6.5%	10.5%	2.3%				
	6-8 hours	81	136	34				
		26.5%	44.4%	11.1%				
Time on job	0.121	37	15	3	2	23.396	0.000*	
	8-12 hours	12.1%	4.9%	1.0%				
	0-5 years	24	91	22				
	,	7.8%	29.7%	7.2%				
X 7		77	60	13	4	58.253	0.000*	
Years on Job	6-10 years	25.2%	19.6%	4.2%				
	>10 years	17	0	2				
	210 yours	5.6%	0.0%	0.7%				

The Chi-square test of independence to ascertain whether there is a relationship (p0.05) between the factors and hypertension is displayed in the table above.

Hypothesis

According to the table, 8.2% (25) of the males and 3.9% (12) of the females had hypertension. The results of the Chi-square test were 8.972 with a p-value of 0.011. This has statistical importance.

15.3% (26) of people in the 15–30 age range have pre-hypertension, and 1% (3 people) have hypertension. In the age category of 31 to 45 years, 7.8% (24) have hypertension and 36.9% (113) have pre-hypertension. 3.9% (12) of people in the 46-65 age range had pre-hypertension, while 3.3% (10) have hypertension. Regarding time spent at work, 11.1% (34) of those who worked 6–8 hours a day and 1% (3) of those who worked 8–12 hours a day had hypertension. Chi-square test results showed a 23.396 and a 0.000* p-value. There is statistical significance to this value. Regarding the number of years at the current workplace, hy-

Page No: 08 www.mkscienceset.com J Cri Res & Eme Med 2023

pertension affected 7.2% (22) of those who had worked there for 0-5 years, 4.2% (13) of those who had worked there for 6-10 years, and 0.7% (2) of those who had worked there for more than 10 years. The results of the Chi-square test were 58.253 and 0.000*, respectively.

The association Chi-square test produced a result of 29.554 and a p-value of 0.000*. There is statistical significance to this p-value.

1.3% (4) of people with a secondary education have hypertension. while 33 out of 10.8% of those with a college degree had hypertension. Calculated Chi-square values are 0.628 and 0.746, respectively. There is no statistical significance to the p-value.

Regarding marital status, 10.8% (33) of married respondents and 0.3% (1) of separated respondents are both hypertensive, compared to 1% (3) of singles. The Chi-square test of association has a value of 25.030 and a 0.000* p-value. This has statistical importance.

According to job descriptions, 4.2% (13) of the administrative staff, 5.3% (17) of the 132 journalists, and 2.3% (7) of the other employees had hypertension. Chi-square test results have a p-value of 0.106 and a 7.615 value. According to statistics, this is not important. 11.1% (34) of those who spent 6–8 hours at work had hypertension, while 1% (3) of those who spent more than 8 hours at work had diabetes.

Table 7.1: (cont.) Chi-square Test of Independence to Determine Association (p<0.05) Between Risk

Factors and Hypertension Contd.							
	Hypertension Category			Chi-Square Te	st		
Varia	ble	Normal	Pre-HTN	HTN	Df	\mathbf{X}^2	p-value
Family history of	Yes	37	55	16			
HTN		12.2%	18.2%	5.3%	2	1.719	0.425
	**	79	95	21			
	Yes	26.1%	31.4%	6.9%			
Tobacco smoker	Yes	1	3	0	4	1.375	0.920
		0.3%	1.0%	0.0%		Fishers' exact	
	No	117	148	37			
		38.2%	48.3%	12.%			
Alcohol consumption	Yes	45	64	23			
1		14.9%	21.1%	7.6%			
	N	72	85	14	2	6.467	0.039*
	No	23.8%	28.1%	4.6%			
Exercise	Yes	66	97	25			
		21.6%	31.8%	8.2%			
	No	51	54	12	2	2.334	0.311
	No	16.7%	17.7%	3.9%			
Salt consumption	Yes (often)	14	13	2			
		4.6%	4.3%	0.7%			
	Vac (acassianalla)	52	56	9			
	Yes (occasionally)	17.2%	18.5%	3.0%	4	8.572	0.073
	No	51	80	26			
		16.8%	26.4%	8.6%			

Regarding family history of hypertension, 6.9% (21) of individuals with no family history and 5.3% (16) of those with a positive family history were both hypertensive. A chi-square test result of 1.719 and a p-value of 0.425 were obtained. Statistics do not support this.

None of the four smokers was found to have hypertension based on modifiable risk factors for the condition.

In terms of alcohol consumption, 4.6% (14) of those who do not drink alcohol and 7.6% (23) of those who do were both hy-

pertensive. 6.467 is the Chi-square test's value, and 0.039 is its p-value. This has statistical importance.

Regarding exercise, 8.2% (25) of those who exercised had hypertension, compared to 3.9% (12) of those who do not exercise. Chi-square test result: 2.334; p-value: 0.311. Regarding salt consumption, 0.7% (2) of people who frequently add more salt to their meals, 3% (9) of people who occasionally add extra salt to their meals, and 8.6% (26) of people who do not add extra salt to their meals were hypertensive.

Page No: 09 www.mkscienceset.com J Cri Res & Eme Med 2023

Table 8: Logistic Regression Analysis for the Relationship Between Possible Risk Factors and Hypertension.

Variable		Odd ratio	p-value	95%	CI
				Minimum	maximum
	15-30 years	0.081	0.000	0.031	0.214
Age	31-45 years	0.219	0.000	0.019	0.441
<i>6</i> *	46-65 years	-	-	1	-
_	Male	1.932	0.012	1.157	3.224
Sex	Female	-	-	1	-
	Single	0.085	0.011	0.013	0.562
Marital Status	Married	0.345	0.250	0.056	2.115
	Separated	-	-	1	-
Time Spent on Job	6-8 hours	3.716	0.004	1.532	9.010
Time Spent on Job	8-12 hours	-	-	-	-
	0-5 years	5.60	0.025	1.245	25.185
Years on Job	6-10 years	1.803	0.447	0.394,	8.251
	>10 years	-	-	-	-
Alcohol Consumption	Yes	1.434	0.157	0.870	2.363
	No	-	-	-	-

The investigation of the link between potential risk variables and hypertension is shown in table 8 above using a logistic regression model. Age had an odds ratio of 0.081 and a p-value of 0.000 (95% CI: 0.031, 0.214). Odd ratio 0.219, p-value 0.000 (95% CI 0.109, 0.441), for age group 31-45 years. The males' odds ratio for sex is 1.932, with a p-value of 0.012 (95% CI 1.157, 3.224). Married respondents have an Odd ratio of 0.345, p-value 0.250 (95% CI 0.056, 2.115), while single respondents have an Odd

ratio of 0.085, p-value 0.011 (95% CI 0.013, 0.562) for marital status. Odd ratio for the group of people who work 6 to 8 hours per day is 3.716, with a p-value of 0.004 (95% CI 1.532, 9.010). Regarding the number of years at the current job, the odds ratio for 0–5 years is 5.60, and the p-value for 6–10 years is 0.447 (95% CI 0.394, 8.251). The odds ratio for those who consume alcohol is 1.434, with a p-value of 0.157 (95% CI 0.870, 2.363).

Table 9: Logistic Regression Analysis (Adjusted Odd Ratio) for the Relationship Between Possible Risk Factors and Hypertension.

Variable		Adjusted Odd ratio	p-value	95% CI	
				Minimum	maximum
Age	15-30 years	5.882	0.002	1.955	17.669
	31-45 years	4.225	0.000	2.032	8.787
	46-65 years	-	-	-	-
Sex	Male	0.636	0.121	0.359	1.003
	Female	-	-	-	-
Marital Status	Single	8.112	0.050	1.003	65.620
	Married	2.863	0.298	0.394	20.787
	Separated	-	-	-	-
Time Spent on Job per day	6-8 hours	0.200	0.004	0.067	0.594
	8-12 hours	-	-	-	-
Years Spent on Job	0-5 years	1.326	0.533	1.082	1.082
	6-10 years	2.642	0.033	1.082	0.366
	>10 years	-	-	-	-
Alcohol Consumption	Yes	0.639	0.115	0.366	1.115
	No	-	-	-	-

The adjusted Odd ratio analysis of the connection between potential risk variables and hypertension is displayed in table 9 above. Age-adjusted odds ratio for individuals aged 15 to 30 is

5.882, with a p-value of 0.002 (95% CI 1.955, 17.699). Adjusted Odd Ratio 4.225, p-value 0.000 (95% CI 2.032, 8.787) for age group 31-45 years. The men' adjusted Odd ratio for sex is

Page No: 10 www.mkscienceset.com J Cri Res & Eme Med 2023

0.636, and their p-value is 0.121 (95% CI 0.395, 1.127). Married respondents adjusted Odd ratio is 2.863, with a p-value of 0.298 (95% CI 0.394, 20.787), whereas single respondents adjusted Odd ratio is 8.112, with a p-value of 0.050 (95% CI 1.003, 65.620). Considering the number of years, a daily time spent at work of 6 to 8 hours has an adjusted Odd ratio of 0.200 and a p-value of 0.004 (95% CI 0.067,0.594). In terms of years on the job, the adjusted Odd ratio for 0–5 years is 1.326, with a p-value of 0.533 (95% CI 0.546, 3.218), while the adjusted Odd ratio for 6–10 years is 2.642, with a p-value of 0.033 (95% CI 1.082, 6.453). Odd ratio is 0.639 for those who consume alcohol, with a p-value of 0.115 (95% CI 0.366, 1.115).

Discussion

47.5% (152) of the 320 respondents have pre-hypertension, 15.3% (49) have hypertension, and 37.2% (119) of them have normal blood pressure.

As a result, the sampled population's approximate prevalence of hypertension is 15.3%.

In the most populous country in Africa, hypertension affects over 11% of individuals and is one of the most common non-communicable diseases [12].

This is also in line with recent data, which found that hypertension was 12.5% common among a sample of journalists between the ages of 20 and 65 who were assessed for cardiovascular risk factors at the Ghana Broadcasting Corporation's headquarters in Accra [13].

Professionals working in electronic media in Owerri have a higher prevalence of hypertension (15.3%) than bankers in the city (12.4%), according to a cross-sectional survey [13].

is lower than the 27.8% recorded by academics from Yenagoa's civil officials and the 27.5% from Akwa Ibom's city dwellers. In [14].

This is also notably less than the results of a statewide survey conducted in the Niger Delta, which estimated a prevalence of 52.8% for the South East [15].

This disparity could be attributed to the comparatively young age of people employed in the electronic media.

The age range of 87% of the responses is between 18 and 45 years old.

Alcohol use was found to be high and positively connected with hypertension in this study of Owerri's electronic media employees' modifiable risk factors for the illness. These results corroborate those of who discovered a substantial relationship between smoking and alcohol use and hypertension [16].

Moreover, over 38% of them do not engage in any physical activity, and those who do typically exercise infrequently and for extremely short durations.

Overweight and obesity were found to be common in this group, with a total score of 61.6%.

This finding tends to support the finding of [18], who observed that journalists in Peshawar, Pakistan, had a significant incidence of cardiovascular risk factors.

When it came to the knowledge variable for hypertension, 99.7 (319) of the respondents correctly identified hypertension as the same as increased blood pressure.

Additionally, the great majority of them (96.2% of 305) are aware that stress and over-anxiety may contribute to the development of hypertension and that problems may arise if blood pressure is not controlled.

99.4% of respondents know that managing hypertension with medicines requires a lifetime commitment.

The majority of them possess education and access to health information, which could potentially account for the previously reported results.

However, 62.1% (197) of the participants disapproved of the idea that a family history of hypertension raised a person's risk of getting it.

When asked about their views toward hypertension, 81.3 (257) of the sampled population admitted that they did not regularly check their blood pressure.

57.5% (181) of the respondents cannot remember the last time they took their blood pressure, and 4.8% (15) have never had one taken.

The respondents had a negative attitude toward hypertension, even though 98% (292) of them would prefer hospital care over conventional treatment and 99% would change a risky lifestyle if it were discovered to be the cause of their hypertension.

This is because over 81% of them neglect to take their blood pressure on a regular basis.

This proves that even with the health jingles that are played on electronic media, the staff still needs specific health education.

In reality, 136 individuals, or 42.9% of those with modifiable risk factors for hypertension, drink alcohol of different brands.

Of those who drink, 54.4% take two or more drinks every day.

In a logistic regression research, this was found to be positively correlated with hypertension (Odd ratio: 1.434, p-value: 0.157 (95% CI: 0.870, 2.363), and statistically significant (using the Chi-square test).

Studies reveal that alcohol use carries a 1.4-fold higher risk of hypertension.

However, the AOR was 0.639 with a p-value of .115 (95% CI: 0.366, 1.115) after taking alcohol into consideration.

When compared to other risk factors, this indicates that there is no discernible correlation between it and hypertension.

Page No: 11 www.mkscienceset.com J Cri Res & Eme Med 2023

Regarding activities, 61.1% (195) say they work out, while 38.9% (124) say they don't.

Nearly half (94) begin to walk, 42.6% (80) begin to jog, and 7.4% run (14) on the indoor machine.

Most of them—67.8% (122)—work out for 15 to 30 minutes; 90.8% (168)—work out once or more a week; and 90.9% (289)—take public transit or drive themselves to work.

Merely 9.1% (29) of individuals travel to work on foot or by bicycle.

The statistics provided above indicates that most people who work in electronic news media have sedentary lives.

They are not physically active at all.

Sedentary lives are known to be associated with hypertension.

The p-value of 0.311 in the Chi-square test used to evaluate the connection did not indicate that this was the case.

The predominantly young demographic of the study population may help to explain this conclusion.

Furthermore, a lot of people who exercise don't work out regularly or long enough.

This could mask the effects of exercise in lowering blood pressure.

Sociodemographic and employment characteristics showed that 3.9% (12) of females and 8.2% (25) of males, respectively, had hypertension. This is statistically significant since the p-value of 0.011 0.05 and the computed Chi-square value of 8.972 are both greater than the tabular Chi-square value. In a similar vein, the Odd ratio for men using logistic regression to show a connection between sex and hypertension is 1.932 p-value 0.012 (95%CI 1.157, 3.224).

This shows that being a man increases the risk of hypertension by 1.9 times when compared to women in the same age group and circumstances. This is consistent with the findings of [19], who demonstrated that the prevalence of hypertension was higher in men than in women in his meta-analysis of research publications. According to the WHO Global Health Observation 2008, men across all WHO regions have Men are somewhat more likely than women to have high blood pressure.

However, when odds for other traits (confounders) were considered, gender became irrelevant because the adjusted odds ratio of 0.636 is nearly the same as that of the female reference group. This shows that, among the study group, being a guy did not increase the risk of high blood pressure on its own.

Age-wise, 31–45-year olds make up 65% (208) of the study population, with 15–30-year olds (22% (71) and 46–65-year olds (12.8%) following closely behind. 41. A bachelor's degree or above is held by 85% of respondents (271). This illustrates how

younger, more educated age groups are attracted to and retained in the news media sector. Given how fast and sophisticated the electronic news media industry is growing, this is to be expected. These elements demand the skills, aptitude, and vitality that youth and education can provide. A Chi-square test of association revealed a substantial correlation between age and hypertension. In the 15–30 age range, three out of 71 individuals had hypertension. (10 out of 30 in the 46 to 65 age group; 33.3%), 24 out of 205 in the 31 to 45 age group (11.7%), and 10 out of 205 in the 31 to 45 age group (4.4%) were hypertensive.

When analyzing the association between age and hypertension for the 15-30 age range using logistic regression analysis, the odds ratio is 0.081 and the p-value is 0.000 (95% CI 0.031 to 0.214). In the age range of 31 to 45 years, the odds ratio is 0.219, and the p-value is 0.000 (95% CI 0.109 to 0.411). The chances ratio for hypertension is less than one in the two groups. This seems to support the null hypothesis, which states that there is no difference in blood pressure between the age groups of 15-39 and 31–45 and the reference age group of 46–65 years. The well-known and extensively studied finding that the prevalence of hypertension increases with age is at odds with this finding. Nevertheless, when the age variable was changed, the adjusted Odd ratio started to gain significance. Adjusted Odd ratio 5.882, p=0.002 (95% CI: 1.95, 17.699) for the 15-30 age group. This indicates that this group has a 5.9 times lower probability of having hypertension than the reference group, which is comprised of people aged 46 to 65. Age-related increases in blood pressure are thus common.

Of the respondents, 65.2% (208) are married; single respondents make up 33.2% (106) and separated or divorced respondents make up 0.3% (4). Using the Chi-Square test on the marital status data, a positive connection between marital status and hypertension was discovered. Thirty-three of the hypertensive patients were married, three were single, and one had either split or divorced. The computed chi-square has a p-value of 0.000 and was 25.030. This indicates a connection between marital status and hypertension. However, when examining the link in isolation, logistic regression analysis did not reveal any appreciable association between marital status and hypertension. But after marital status was considered, a noteworthy correlation was discovered. Single AOR 8.112, p-value 0.050 (95% CI 1.003, 65.620); married AOR 2.863, p-value 0.298 (95% CI 0.394, 20.787). Studies show that compared to the reference group, singles have an eight-fold increased risk of hypertension.

Of the respondents, 65.2% (208) are married; single respondents make up 33.2% (106) and separated or divorced respondents make up 0.3% (4). They found that men who were single frequently had higher systolic and diastolic blood pressure than those who were married. males who were never married had a higher risk of hypertension than married males, even with lower BMIs, even after controlling for a number of demographics, so-cioeconomic, and lifestyle characteristics [20].

The results of this study may have been impacted by the fact that married respondents made up the majority of the sample (65.2%). Once more, the majority of single people have reduced hypertension rates [21-23].

Page No: 12 www.mkscienceset.com J Cri Res & Eme Med 2023

There was no significant correlation (chi-square test) between employment description and hypertension. This indicates that employment in a certain unit of the electronic news media organization may not be associated with a higher risk of hypertension when compared to other units. A positive correlation with the amount of time spent at work was found using the Chi-square test of association. The computed chi-square was 23.396, with a p-value of 0.000* < 0.05. There was a correlation between working hours and hypertension in a logistic regression research; the odds ratio was 3.716, p-value 0.004 (95% CI 1.532, 9.010). However, the AOR for this variable is 0.200, and the p-value is 0.004 (95% CI 0.067) indicates that the association between work hours and hypertension is not statistically significant when corrected [24].

A favorable correlation between the number of years spent in the current job and hypertension was found using the chi-square test of association. The computed chi-square was 58.253, with a p-value of 0.000* < 0.05.

In a logistic regression analysis, the odds ratio for 0 to 5 years was 5.60, and the p-value was 0.025 (95% CI 1.245, 25.185) to show that years spent in the current work were associated with hypertension. Studies show that having a single job for up to five years may increase your chance of developing hypertension. Likewise, a p-value of 0.447 (95% CI 0.394, 8.251) and an odds ratio of 1.803 were obtained for holding a single job for six to ten years. They show a positive relationship between hypertension and the length of time spent working at a job.

Conclusion

15.3% of electronic news media professionals in Owerri have high blood pressure. This figure is less than the one Owerri bankers were given. The fact that 87.2% of respondents were between the ages of 18 and 45 may be the cause of this.

Modifiable risk factors for hypertension are significantly more common among Owerri's electronic media workforce. Indicators of this include high rates of alcohol consumption (42.9%) and physical inactivity (38.9%). Of them, 41.9% were overweight and 19.7% were obese.

A significant portion of the respondents—roughly 85% of those with tertiary qualifications—know a lot about hypertension. Only 18.7% of the respondents routinely checked their blood pressure, indicating a weak attitude toward hypertension. It was shown that, in reality, improper dieting was also common among them, as just 16.7% of them included cooked vegetables in their meals every day and 3.8% consumed fruits.

When the odds ratios (relationship between factors and hypertension) were assessed using logistic regression analysis, the following variables showed a significant correlation: alcohol consumption, number of years on the job, sex, and time spent at work. After accounting for other variables, the adjusted Odd ratio was significant for age, married status, and years in the work.

References

1. Stone MS, Martyn L, Weaver CM (2016) Potassium Intake, Bioavailability, Hypertension, and Glucose Control. Nutrients 8: 444.

- 2. Ulasi II, Ijoma CK, Onodugo OD (2010) A community-based study of hypertension and cardio-metabolic syndrome in semi-urban and rural communities in Nigeria, BMC Health Services Research 10: 1-6.
- Adeloye D, Owolabi EO, Ojji DB, Auta A, Dewan MT, et al. (2021) Prevalence, awareness, treatment and control of hypertension in Nigeria in 1995 and 2020: A systemic analysis of current evidence. Journal of Clinical Hypertension 23: 963-977.
- 4. Dickinson HO, Campbell F, Beyer FR, Nicolson DJ, Cook JV, et al. (2008) Relaxation therapies for the management of primary hypertension in adults. The Cochrane database of systematic reviews 23.
- 5. Diwe KC, Enwere OO, Uwakwe KA, Duru CB, Chineke HN (2015) prevalence and awareness of hypertension and associated risk factors among bank workers in Owerri, Nigeria: international journal of medicine and biomedical research 4: 67-68.
- Abisola MO, Olufumilayo F, Patrick N, Peter N (2012) prevalenc and factor associated with hypertension and obesity among civil servant in Kaduna, kaduna state.june, pan Afr med J 18: 13.
- 7. Egbi OG, Okafor UH, Miebodei KE, Kunle-OlowuOE, Unuigbe EI (2013) Prevalence of hypertension in an urban population in Bayelsa state, Nigeria. J. MedRes Pract 2: 11-15.
- 8. Emerole CO, Aguwa EN, Onwasigwe CN, Nwakoby BA (2007) Cardiac risk indicess of staff of Federal University of Technology Owerri, Imo state, Nigeria, Tanzania Health Research Bulletin 9: 132-135.
- 9. Aburto NJ, Ziolkovska A, Hooper L, Elliott P, Cappuccio FP, et al. (2013) Effect of lower sodium intake on health: systematic review and meta-analyses, BMJ 346.
- Akinlua JT, Meakin R, Umar AM, Freemantle N (2015)
 Current Prevalence Pattern of Hypertension in Nigeria: A Systematic Review. PloS one 10.
- 11. Athanasakis K (2017) The Socioeconomic Effects of Uncontrolled Hypertension. Current vascular pharmacology 16: 5-9.
- 12. Akinlua JT, Meakin R, Bashir I, Freemantle N (2018) Beliefs about hypertension among primary health care workers and clients in Nigeria: A qualitative study PLoS ONE 13.
- 13. Amidu N, Owiredu W, Mireku, E, Agyemang C (2012) Metabolic syndrome among garage workers in the automobile industry in Kumasi, Ghana, Journal of Medical and Biomedical Sciences 1: 29-36.
- 14. Bello SI, Ojieabu WA, Bello IK (2016) Prevalence of Hypertension Among Fulani Herdsmen in Rural Community of Nigeria. Bangladesh Journal of Medicine 27: 48-54.
- 15. Felton GM, Pate RR, Parsons MA, Ward DS, Saunders RP, et al. (1998) Health risk behaviors of rural sixth graders. Research in nursing & health 21: 475-485.
- 16. Ibekwe R (2015) Modifiable Risk factors of Hypertension and Socio-demographic Profile in Oghara, Delta State; Prevalence and Correlates. Annals of medical and health sciences research 5: 71-77.
- 17. Mente A, O'Donnell M, Rangarajan S, Dagenais G, Lear S, et al. (2016) Associations of urinary sodium excretion with cardiovascular events in individuals with and without hypertension: a pooled analysis of data from four studies. The Lancet 388: 465-475.

- Shi Y, de Groh M, Morrison H (2012) Increasing blood pressure and its associated factors in Canadian children and adolescents from the Canadian Health Measures Survey. BMC public health 388.
- 19. Navar LG (2010) counterpoint: activation of the intra renal rennin –angiotensin system is the dorminant contributor to systemic hypertension J.Appl. physiol 109.
- 20. Lipowicz A, Lopuszanska M (2005) Marital differences in blood pressure and the risk of hypertension among Polish men. European journal of epidemiology 20: 421-427.
- Odili AN, Chori BS, Danladi B, Nwakile PC, Okoye IC, et al. (2020) Prevalence, Awareness, Treatment and Control of Hypertension in Nigeria: Data from a Nationwide Survey 2017. Global heart 15: 47.
- 22. Oladimeji AM, Fawole O, Nguku P, Nsubuga P (2014) Prevalence and factors associated with hypertension and obesity among civil servants in Kaduna, Kaduna State, The Pan African medical journal 18:13.

- Onwuchekwa AC, Mezie-Okoye MM, Babatunde S (2012) Prevalence of hypertension in Kegbara-Dere, a rural community in the Niger Delta region, Nigeria. Ethnicity & disease 22: 340-346.
- 24. Kaufman, Jay S, Owoaje Eme E, James Sherman A, Rotimi Charles N, et al. (1996) Determinants of Hypertension in West Africa: Contribution of Anthropometric and Dietary Factors to Urban-Rural and Socioeconomic Gradients, American Journal of Epidemiology 143: 1203-1218.
- 25. Schwandt HM, Coresh J, Hindin MJ (2010) Marital Status, Hypertension, Coronary Heart Disease, Diabetes, and Death Among African American Women and Men: Incidence and Prevalence in the Atherosclerosis Risk in Communities (ARIC) Study Participants. Journal of family issues 31: 1211-1229.

Copyright: ©2023 Nwanyaka Henry Ifeanyi, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Page No: 14 www.mkscienceset.com J Cri Res & Eme Med 2023