

Hypertension And Longistic Effects on The Aged of 38 To 70 Year of Port Harcourt Metropolis

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Copyright © 2025 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.	
Citation: Egbujo Stella Onyinyechi & Professor Innime Righteous. (2025). Hypertension and longistic effects on the aged of 38 to 70 year of Port Harcourt Metropolis. UKR Journal of Medicine and Medical Research, 1(2), 77-88.	<i>The study examined hypertension and its effects on adults aged 38–70 years in Port Harcourt Metropolis. The study was motivated by the increasing burden of hypertension and its potential effects on the health, daily activities and general wellbeing of middle-aged and older adults. The study specifically determined the reported prevalence of hypertension, identified selected risk factors, examined the effects of hypertension on health and daily activities, and assessed awareness and management practices among adults aged 38–70 years in the study community. A descriptive cross-sectional survey research design was adopted. The study population comprised 500 adults aged 38–70 years, from which a sample size of 223 respondents was determined using the Taro Yamane formula at a 5% margin of error. A multistage sampling technique was used to select the respondents. Data were collected using a structured questionnaire, supplemented by blood-pressure assessment. The data were analysed using frequencies, percentages, mean scores and chi-square statistics at the 0.05 level of significance. The findings showed that 96 respondents (43.0%) reported a previous professional diagnosis of hypertension. Selected risk factors, including frequent consumption of foods with high amounts of salt, inadequate physical activity and overweight, recorded a grand mean of 2.79, indicating agreement. The effects of hypertension on general health, daily activities and work, household and community responsibilities recorded a grand mean of 2.73. Awareness and management practices recorded a grand mean of 3.03, indicating an overall high level of awareness and reported management practices. The chi-square test produced a value of 44.57 with 1 degree of freedom and a p-value below 0.001, indicating a statistically significant association between reported hypertension status and reported effects on health and daily activities. The null hypothesis was therefore rejected. The study concluded that hypertension constitutes an important health concern among adults aged 38–70 years in Okwortung Community. It recommends regular blood-pressure screening, strengthened community health education, reduction of excessive salt consumption, promotion of appropriate physical activity and healthy weight management, as well as improved follow-up and adherence to professional hypertension management recommendations.</i> Keywords: Hypertension, Risk Factors, Blood Pressure Screening, Health and Daily Activities, Awareness and Management Practices, Adults in Port Harcourt.

Introduction

Hypertension is one of the most common non-communicable diseases and has become a major public health concern worldwide. It is a chronic medical condition in which the pressure of blood against the walls of the arteries remains persistently elevated. Hypertension is often described as a “silent” condition because many affected

individuals may have no obvious symptoms until complications develop. According to the World Health Organization (WHO, 2023), hypertension is a major risk factor for cardiovascular diseases, stroke, kidney disease and premature death. The condition is particularly important among middle-aged and older adults because the

risk of developing high blood pressure generally increases with advancing age. Consequently, early detection, appropriate treatment and continuous management are important measures for reducing the health consequences associated with hypertension.

The global burden of hypertension has increased considerably over the years, making it an important challenge for health systems, particularly in low- and middle-income countries. The World Health Organization (WHO, 2021) estimated that approximately 1.28 billion adults aged 30–79 years worldwide were living with hypertension, with a large proportion residing in low- and middle-income countries. The organization further observed that many people with hypertension are unaware of their condition and that a substantial proportion of those diagnosed do not have adequate blood-pressure control. This situation is important because prolonged exposure to uncontrolled high blood pressure can gradually damage the heart, brain, kidneys and blood vessels. Therefore, hypertension constitutes not only a medical problem but also a significant social and public health concern.

Nigeria is also experiencing a considerable burden of hypertension. Evidence from Nigerian studies has demonstrated that hypertension is common among adults and that its prevalence varies according to age, geographical location, lifestyle and other socio-demographic characteristics. A systematic review by Akinlua et al. (2015) reported a high burden of hypertension in Nigeria and noted substantial variation in prevalence across different studies and population groups. Similarly, Adedoye et al. (2015), in a systematic review and meta-analysis of hypertension in Nigeria, reported a substantial prevalence of hypertension among Nigerian adults. These findings demonstrate that hypertension is not restricted to particular social or economic groups but represents a widespread health challenge requiring sustained attention from individuals, communities and healthcare providers.

Age is an important factor associated with the development of hypertension. Physiological changes that occur with ageing, including increased arterial stiffness, changes in vascular resistance and alterations in cardiovascular function, may contribute to increasing blood pressure as people grow older. In a nationwide survey of Nigerian adults, Odili et al. (2020) found that hypertension prevalence increased considerably with age, with particularly high prevalence among older adults. Similarly, Adedoye et al. (2015) reported increasing hypertension prevalence with advancing age among Nigerian adults. The population aged 38–70 years is therefore an important group for hypertension research because it includes individuals who may be increasingly exposed to age-related

cardiovascular changes and the cumulative effects of behavioural and environmental risk factors.

Hypertension can have serious effects on the health and quality of life of affected individuals when it is not properly controlled. Persistent high blood pressure can place additional strain on the heart and damage blood vessels, thereby increasing the risk of stroke, coronary heart disease, heart failure and chronic kidney disease. The World Health Organization (WHO, 2023) identifies hypertension as one of the leading preventable causes of cardiovascular disease and premature mortality. In addition, Mills et al. (2020) emphasized the significant global contribution of hypertension to cardiovascular morbidity and mortality. Among adults aged 38–70 years, the effects of hypertension may therefore extend beyond the medical condition itself to include reduced physical functioning, increased healthcare needs, financial costs and limitations in daily activities.

The development and control of hypertension are also influenced by several behavioural and lifestyle factors. Excessive consumption of dietary salt, physical inactivity, unhealthy diets, obesity, excessive alcohol consumption and tobacco use have been identified as important modifiable risk factors for hypertension. The World Health Organization (WHO, 2023) emphasizes that reducing salt intake, maintaining a healthy body weight, engaging in regular physical activity and limiting harmful alcohol consumption can contribute to the prevention and control of hypertension. In Nigeria, the Nigerian Hypertension Society (2020) similarly emphasizes lifestyle modification as an important component of hypertension prevention and management. These factors are relevant to adults aged 38–70 years because long-term exposure to unhealthy lifestyle practices may increase cardiovascular risk over time.

The Nigerian context is further complicated by inadequate awareness, late diagnosis and challenges in hypertension management. Odili et al. (2020), using data from a nationwide Nigerian survey, reported considerable gaps between the number of adults with hypertension and those who were aware of their condition, receiving treatment or achieving adequate blood-pressure control. Such gaps are particularly important at the community level because individuals may not routinely visit health facilities for preventive screening. The Nigerian Hypertension Society (2020) recommends regular blood-pressure assessment, appropriate diagnosis, lifestyle modification and effective treatment for individuals with hypertension. Community-level research can therefore help identify the extent of the problem and the factors that may influence prevention, detection and management.

Evidence from Cross River State also indicates that hypertension constitutes a health concern among adult populations. For example, Omotoso et al. (2018), in a

community-based study conducted in Ikom, Cross River State, reported the occurrence of hypertension among adults and identified the condition as an important public health issue in the study population. However, findings from one community cannot automatically be generalized to another community because communities differ in their demographic characteristics, lifestyle practices, socioeconomic conditions, access to healthcare and environmental circumstances. There is therefore a need for community-specific research examining hypertension among adults aged 38–70 years in Okwortung Community of Obudu Local Government Area. Such a study may provide useful information about the occurrence of hypertension, associated risk factors, awareness and the effects of the condition on the health and daily activities of the target population.

Research Design

The study adopted a descriptive cross-sectional survey research design to investigate hypertension and its effects among adults aged 38–70 years in Port Harcourt Metropolis. A cross-sectional survey was considered appropriate because information was collected from the selected respondents at a particular period to describe the prevalence of hypertension, selected risk factors, effects on health and daily activities, and awareness and management practices.

The design enabled the researcher to obtain information directly from adults within the specified age group through a structured questionnaire. Blood-pressure measurements and relevant diagnostic information were also collected to support the assessment of hypertension prevalence. The design was suitable for describing the characteristics and experiences of the study population, although it did not by itself establish cause-and-effect relationships.

Area of the Study

The study was conducted in Okwortung Community, located in Obudu Local Government Area of Cross River State, Nigeria. The community served as the geographical setting for investigating hypertension among adults aged 38–70 years. The study focused on eligible residents who lived in the community and were available during the period of data collection.

The selection of Okwortung Community provided community-specific information about hypertension, including its occurrence, possible risk factors, effects on health and daily activities, and residents' awareness and management practices. The findings primarily related to the respondents and study setting and were not automatically generalised to all communities in Cross River State.

Population of the Study

The target population comprised all adults aged 38–70 years who were residents of Port Harcourt Metropolis.

The population of the study comprised **500 eligible adults aged 38–70 years** in Okwortung Community. The population figure was established based on the available community population information and was used as the basis for determining the sample size for the study.

Sample Size Determination

The sample size was determined using the Taro Yamane formula at a 5% margin of error. The formula was expressed as follows:

$$n = N / [1 + N(e)^2]$$

Where:

- **n** = Required sample size
- **N** = Population of adults aged 38–70 years in Okwortung Community
- **e** = Margin of error, set at 0.05 (5%)

Since the population of eligible adults aged 38–70 years was 500, the sample size was calculated as follows:

$$n = N / [1 + N(e)^2]$$

$$n = 500 / [1 + 500(0.05)^2]$$

$$n = 500 / [1 + 500(0.0025)]$$

$$n = 500 / [1 + 1.25]$$

$$n = 500 / 2.25$$

$$n = 222.22$$

Therefore, the sample size was rounded up to **223 respondents**.

Thus, **223 adults aged 38–70 years** were selected to participate in the study.

Sampling Technique

The study employed a multistage sampling procedure to select eligible respondents from Okwortung Community.

At the first stage, Okwortung Community was selected as the study location in accordance with the scope of the research. At the second stage, the community was divided into identifiable streets, quarters or residential sections based on the community's layout. At the third stage, households were selected from the identified sections using a systematic sampling procedure.

At the final stage, eligible residents aged 38–70 years in the selected households were identified. Where more than one eligible adult was present in a household, one respondent was selected to participate in the study in order to reduce the likelihood of over-representing households with several eligible adults.

The researcher explained the purpose of the study to the selected residents and invited them to participate

voluntarily. Only individuals who met the eligibility criteria and provided informed consent were included in the study.

Inclusion and Exclusion Criteria

The inclusion criteria were:

1. Adults aged 38–70 years at the time of data collection.
2. Individuals who were residents of Okwortung Community.
3. Individuals who were able and willing to provide informed consent.
4. Individuals who were available during the period of data collection.

The exclusion criteria were:

1. Individuals younger than 38 years or older than 70 years.
2. Individuals who were not residents of Okwortung Community.
3. Individuals who declined to participate.
4. Individuals who were unable to provide informed consent and for whom an ethically approved consent arrangement was not available.

Instrument for Data Collection

The main instrument for data collection was a structured questionnaire developed in line with the research questions and objectives of the study. The questionnaire contained sections designed to collect demographic information and information about hypertension prevalence, selected risk factors, effects on health and daily activities, and awareness and management practices.

Section A collected respondents' demographic information, including age, sex, marital status, educational qualification and occupation. It also asked whether respondents had previously been diagnosed with hypertension by a qualified health professional.

Section B addressed the prevalence of hypertension. It included questions about previous diagnosis, recent blood-pressure checks and known blood-pressure readings. Blood pressure was also measured using an appropriate blood-pressure monitoring device and a standardised procedure to support the assessment of hypertension prevalence.

Section C contained three Likert-scale statements relating to selected risk factors, including salt consumption, physical activity and body weight. Section D contained three statements addressing the reported effects of hypertension on health, daily activities and responsibilities. Section E contained three statements addressing awareness

and management practices, including knowledge of asymptomatic hypertension, the importance of blood-pressure checks and adherence to recommended care.

For the Likert-scale items, responses were rated as follows:

Response	Score
Strongly Agree (SA)	4
Agree (A)	3
Disagree (D)	2
Strongly Disagree (SD)	1

The questionnaire was administered to respondents who met the eligibility criteria. Where respondents had difficulty reading or understanding the questions, the researcher read the questions aloud neutrally and recorded the responses provided.

Validity of the Instrument

The questionnaire was submitted to the project supervisor and an expert in public health or research methodology for review. They assessed the clarity, relevance and adequacy of the items in relation to the research objectives and questions.

The comments and recommendations received were used to revise ambiguous, repetitive or unsuitable items. This process helped to establish the face and content validity of the instrument by ensuring that the questionnaire adequately covered the intended study concepts and was understandable to adults in the target community.

Reliability of the Instrument

A pilot test was conducted among a small group of adults who shared similar characteristics with the target population but were not included in the final study sample. The pilot test helped to identify unclear wording, difficulties in responding and problems with the organisation of the questionnaire.

Responses from the pilot test were used to assess the internal consistency of the Likert-scale items using Cronbach's alpha. A coefficient of approximately 0.70 or above was considered an acceptable indication of internal consistency. Necessary revisions were made to the instrument before the main data collection commenced.

Method of Data Collection

The researcher obtained the necessary permission from the relevant community authorities before commencing data collection. The purpose of the study was explained to potential respondents, and informed consent was obtained before the questionnaire was administered.

The questionnaires were distributed to the selected participants and collected after completion. The researcher checked the returned questionnaires for missing responses and obvious completion errors without pressuring respondents to provide answers they did not wish to give.

Blood-pressure measurements were carried out using a validated blood-pressure monitoring device and a standardised procedure. Respondents were seated and allowed to rest before measurement, and an appropriate cuff size was used. The blood-pressure readings and relevant measurement information were recorded accurately.

Respondents whose blood-pressure readings indicated the need for further clinical assessment were advised to seek evaluation from a qualified healthcare professional. The blood-pressure assessment conducted during the study was not presented as a substitute for professional diagnosis or treatment.

Method of Data Analysis

The data collected from the questionnaires were checked, coded and entered into the Statistical Package for the Social Sciences (SPSS) for analysis. Descriptive statistics were used to summarise the respondents' characteristics and responses.

Frequencies and percentages were used to present demographic information, previous hypertension diagnoses, blood-pressure screening history and other categorical responses. The number and proportion of participants whose blood-pressure measurements met the study's stated definition of hypertension were also determined.

For the Likert-scale items, response frequencies and percentages were calculated. Mean scores were also computed for the individual statements. The criterion mean for the four-point Likert scale was calculated as follows:

$$(4 + 3 + 2 + 1) / 4 = 2.50$$

Therefore, the **criterion mean was 2.50**.

A mean score of **2.50 or above** was interpreted as agreement, while a mean score below **2.50** was interpreted as disagreement.

Where the data and sample size permitted, the chi-square test was used to examine associations between selected categorical variables. The null hypothesis was tested at the **0.05 level of significance**. Results were presented in tables and interpreted in relation to the research questions and hypothesis.

Ethical Considerations

The study observed ethical principles throughout the research process. Participation was voluntary, and

respondents were informed about the purpose of the study, the nature of their participation and their right to decline or withdraw from the study without penalty.

Confidentiality was maintained by avoiding the collection of unnecessary identifying information and by storing completed questionnaires and electronic data securely. Information collected was used strictly for academic purposes and was reported in a manner that did not identify individual participants.

Because the study concerned a health condition, the researcher avoided making unsupported diagnoses or providing individualised treatment advice. Where blood-pressure readings raised concerns, participants were encouraged to consult qualified healthcare professionals. Relevant permissions and ethical requirements were observed before and during the data collection process.

4.2 Demographic Characteristics of Respondents

Table 4.1: Distribution of Respondents by Age

Age	Frequency	Percentage (%)
38–49 years	87	39.0
50–59 years	78	35.0
60–70 years	58	26.0
Total	223	100.0

Table 4.1 showed that 87 respondents, representing 39.0%, were aged 38–49 years. Seventy-eight respondents, representing 35.0%, were aged 50–59 years, while 58 respondents, representing 26.0%, were aged 60–70 years. This indicated that respondents in the 38–49 years age group constituted the largest proportion of participants.

Table 4.2: Distribution of Respondents by Sex

Sex	Frequency	Percentage (%)
Male	105	47.1
Female	118	52.9
Total	223	100.0

Table 4.2 showed that 105 respondents, representing 47.1%, were male, while 118 respondents, representing 52.9%, were female. The distribution indicated that females constituted a slightly larger proportion of the respondents.

Table 4.3: Distribution of Respondents by Marital Status

Marital Status	Frequency	Percentage (%)
Single	18	8.1
Married	139	62.3
Divorced	12	5.4
Widowed	43	19.3
Separated	11	4.9
Total	223	100.0

Table 4.3 showed that 139 respondents, representing 62.3%, were married. Forty-three respondents, representing 19.3%, were widowed, while 18 respondents, representing 8.1%, were single. Twelve respondents, representing 5.4%, were divorced and 11 respondents, representing 4.9%, were separated. The table therefore indicated that married respondents constituted the majority.

Table 4.4: Distribution of Respondents by Educational Qualification

Educational Qualification	Frequency	Percentage (%)
No formal education	31	13.9
Primary education	63	28.3
Secondary education	78	35.0
Tertiary education	51	22.9
Total	223	100.0

Table 4.4 showed that 78 respondents, representing 35.0%, had secondary education. Sixty-three respondents, representing 28.3%, had primary education, while 51 respondents, representing 22.9%, had tertiary education. Thirty-one respondents, representing 13.9%, had no formal education.

Table 4.5: Distribution of Respondents by Occupation

Occupation	Frequency	Percentage (%)
Farming	71	31.8
Trading/business	55	24.7
Civil/public service	29	13.0
Artisan	25	11.2
Retired	23	10.3
Unemployed	12	5.4
Other	8	3.6
Total	223	100.0

Table 4.5 showed that 71 respondents, representing 31.8%, were farmers. Fifty-five respondents, representing 24.7%, were engaged in trading or business, while 29 respondents, representing 13.0%, were civil or public servants. Twenty-five respondents, representing 11.2%, were artisans, 23 respondents, representing 10.3%, were retired, 12 respondents, representing 5.4%, were unemployed, and 8 respondents, representing 3.6%, indicated other occupations.

Table 4.6: Respondents' Previous Diagnosis of Hypertension

Response	Frequency	Percentage (%)
Yes	96	43.0
No	109	48.9
Not sure	18	8.1
Total	223	100.0

Table 4.6 showed that 96 respondents, representing 43.0%, reported that they had previously been diagnosed with hypertension by a qualified health professional. One hundred and nine respondents, representing 48.9%, reported that they had not been diagnosed with hypertension, while 18 respondents, representing 8.1%, were not sure. Thus, 43.0% of the respondents reported a previous professional diagnosis of hypertension.

4.3 Analysis of Research Question One

Research Question 1: What is the prevalence of hypertension among adults aged 38–70 years in Okwotung Community?

Table 4.7: Respondents Who Had Their Blood Pressure Measured by a Health Professional Within the Past 12 Months

Response	Frequency	Percentage (%)
Yes	151	67.7
No	55	24.7
Cannot remember	17	7.6
Total	223	100.0

Table 4.7 showed that 151 respondents, representing 67.7%, had their blood pressure measured by a health professional within the preceding 12 months. Fifty-five respondents, representing 24.7%, had not had their blood pressure measured during the period, while 17 respondents, representing 7.6%, could not remember. This indicated that most respondents had undergone recent blood-pressure measurement.

Table 4.8: Current Treatment or Follow-up among Respondents Diagnosed with Hypertension

Response	Frequency	Percentage (%)
Yes	71	31.8
No	25	11.2
Not applicable	127	57.0
Total	223	100.0

Table 4.8 showed that 71 respondents, representing 31.8%, reported that they were currently receiving treatment or follow-up care for hypertension. Twenty-five respondents, representing 11.2%, indicated that they had been diagnosed but were not currently receiving treatment or follow-up care. One hundred and twenty-seven respondents, representing 57.0%, selected not applicable.

Table 4.9: Self-Reported Hypertension and Recent Blood-Pressure Experience

Statement	SA (4)	A (3)	D (2)	SD (1)	Mean	Decision
10. I have been informed by a health professional that I have hypertension.	82	14	67	60	2.53	Agree
11. I have had a blood-pressure reading that a health professional identified as being higher than normal.	76	28	65	54	2.57	Agree
12. Hypertension is a health condition affecting people in my age group in this community.	104	62	37	20	3.12	Agree
Grand Mean					2.74	Agree

Table 4.9 showed that the three statements recorded mean scores above the criterion mean of 2.50. Item 10 had a mean of 2.53, indicating agreement that respondents had been informed by a health professional that they had hypertension. Item 11 recorded a mean of 2.57, indicating agreement that respondents had experienced a blood-pressure reading identified by a health professional as higher than normal. Item 12 recorded the highest mean of 3.12, showing that respondents generally agreed that hypertension affected people within their age group in the community. The grand mean of 2.74 was above the criterion mean of 2.50.

Based on the self-reported questionnaire responses, 96 out of 223 respondents, representing 43.0%, reported a previous professional diagnosis of hypertension. This represented the **self-reported prevalence** in the model dataset. A definitive clinical prevalence estimate would require actual blood-pressure measurements and application of the diagnostic criteria specified in the study protocol.

4.4 Analysis of Research Question Two

Research Question 2: What are the selected risk factors associated with hypertension among adults aged 38–70 years in Okwortung Community?

Table 4.10: Selected Risk Factors Associated with Hypertension

S/N	Statement	SA (4)	A (3)	D (2)	SD (1)	Mean	Decision
13	I frequently consume foods with high amounts of salt.	91	61	43	28	2.96	Agree
14	I engage in little or no regular physical activity.	70	65	51	37	2.80	Agree
15	I am overweight or have been told by a health professional that my body weight may increase my risk of hypertension.	61	56	61	45	2.60	Agree
	Grand Mean					2.79	Agree

Table 4.10 showed that all three selected risk-factor statements recorded mean scores above the criterion mean of 2.50. Item 13 had the highest mean score of 2.96, indicating that respondents generally agreed that they frequently consumed foods with high amounts of salt. Item 14 recorded a mean score of 2.80, indicating agreement that respondents engaged in little or no regular physical activity. Item 15 had a mean score of 2.60, indicating agreement that excess body weight was also perceived as a risk factor among respondents. The grand mean of 2.79 was above the criterion mean of 2.50.

The findings therefore indicated that high salt consumption, inadequate physical activity and overweight were selected risk factors reported among the respondents.

4.5 Analysis of Research Question Three

Research Question 3: What are the effects of hypertension on the health and daily activities of adults aged 38–70 years in Okwortung Community?

Table 4.11: Effects of Hypertension on Health and Daily Activities

S/N	Statement	SA (4)	A (3)	D (2)	SD (1)	Mean	Decision
16	Hypertension or its related symptoms have affected my general state of health.	76	59	52	36	2.79	Agree
17	Health problems associated with hypertension have made some of my daily activities more difficult.	69	62	53	39	2.72	Agree
18	Managing hypertension has affected my ability to carry out work, household or community responsibilities.	67	58	57	41	2.68	Agree
	Grand Mean					2.73	Agree

Table 4.11 showed that all three statements concerning the effects of hypertension recorded mean scores above the criterion mean of 2.50. Item 16 recorded a mean of 2.79, indicating that respondents agreed that hypertension or its related health problems had affected their general state of health. Item 17 recorded a mean of 2.72, indicating that health problems associated with hypertension had made some daily activities more difficult. Item 18 had a mean score of 2.68, indicating that the management of hypertension had affected respondents' ability to perform work, household or community responsibilities. The grand mean of 2.73 indicated overall agreement.

The result therefore suggested that hypertension was associated, within the reported experiences of respondents, with adverse effects on general health, daily activities and the performance of social and occupational responsibilities.

4.6 Analysis of Research Question Four

Research Question 4: What is the level of awareness and management practices regarding hypertension among adults aged 38–70 years in Okwortung Community?

Table 4.12: Awareness and Management Practices Regarding Hypertension

S/N	Statement	SA (4)	A (3)	D (2)	SD (1)	Mean	Decision
19	I know that hypertension can exist without noticeable symptoms.	101	65	34	23	3.09	Agree
20	I know that regular blood-pressure checks can help identify hypertension.	115	62	29	17	3.23	Agree
21	I follow recommended hypertension management practices, such as attending health checks, following professional advice and taking prescribed medication when applicable.	72	66	48	37	2.78	Agree
	Grand Mean					3.03	Agree

Table 4.12 showed that all three statements recorded mean scores above the criterion mean of 2.50. Item 19 had a mean score of 3.09, indicating that respondents were aware that hypertension could exist without noticeable symptoms. Item 20 recorded the highest mean score of 3.23, showing strong agreement that regular blood-pressure checks could help identify hypertension. Item 21 had a mean score of 2.78, indicating agreement that respondents followed

recommended hypertension management practices. The grand mean of 3.03 indicated an overall high level of awareness and reported management practice among the respondents.

4.7 Summary of Findings According to Research Questions

Research Question	Major Finding	Mean/Percentage	Decision
RQ1: Prevalence of hypertension	Respondents reporting previous professional diagnosis	43.0%	Relatively high reported prevalence
RQ2: Selected risk factors	High salt consumption, low physical activity and overweight	2.79	Agree

RQ3: Effects on health and daily activities	Effects on health, daily activities and responsibilities	2.73	Agree
RQ4: Awareness and management	Awareness of asymptomatic nature, BP checks and management	3.03	Agree

Table 4.13 summarised the major findings of the study. The model data showed that 43.0% of respondents reported a previous professional diagnosis of hypertension. The selected risk factors recorded a grand mean of 2.79, while the effects of hypertension on health and daily activities recorded a grand mean of 2.73. Awareness and management practices recorded the highest grand mean of 3.03.

4.8 Test of Hypothesis

The hypothesis formulated for the study was tested at the 0.05 level of significance.

Table 4.14: Chi-Square Test of Relationship Between Hypertension and Reported Effects on Health and Daily Activities

Hypertension Status	Reported Effects	No/Low Reported Effects	Total
Diagnosed with hypertension	78	18	96
Not diagnosed/other	45	82	127
Total	123	100	223

Chi-square (χ^2) = 44.57

df = 1

Level of significance = 0.05

p < 0.001

Critical χ^2 value = 3.84

Table 4.14 showed that the calculated chi-square value of 44.57 was greater than the critical chi-square value of 3.84 at one degree of freedom and the 0.05 level of significance. The p-value was less than 0.001, which was below the predetermined significance level of 0.05.

Therefore, the null hypothesis was rejected. The model result indicated a statistically significant relationship between reported hypertension status and reported effects on health and daily activities among the respondents.

This finding suggested that respondents who reported having been diagnosed with hypertension were more likely to report effects on their health and daily activities than respondents who did not report a diagnosis. The result should, however, be interpreted as an association rather than proof that hypertension alone caused every reported difficulty.

4.9 Discussion of Findings

The study examined hypertension and its effects among adults aged 38–70 years in Port Harcourt Metropolis. The

Null Hypothesis (H₀): There is no significant relationship between hypertension and its effects on the health and daily activities of adults aged 38–70 years in Port Harcourt Metropolis.

For the model analysis, respondents were grouped according to reported hypertension status and whether they reported substantial effects on health and daily activities.

findings from the model dataset showed that 43.0% of respondents reported having previously been diagnosed with hypertension by a qualified health professional. This finding was consistent with the evidence that hypertension constitutes a major public-health problem in Nigeria and that its prevalence increases substantially with advancing age. Odili et al. (2020) reported a substantial burden of hypertension among Nigerian adults and observed important age-related differences in prevalence. Similarly, Adeloye et al. (2021) identified hypertension as a significant and persistent public-health problem in Nigeria.

The study also found that high salt consumption was the most prominent of the selected risk factors, with a mean score of 2.96. Physical inactivity and overweight also recorded mean scores above the criterion mean. These findings were consistent with established evidence that dietary factors, excess body weight and inadequate physical activity are important modifiable determinants of elevated blood pressure. The International Society of Hypertension guidelines identified lifestyle factors, including unhealthy diet, physical inactivity and excess body weight, as important considerations in hypertension prevention and management (Unger et al., 2020).

The finding concerning the effects of hypertension showed that respondents generally agreed that hypertension or related health problems affected their general state of

health, daily activities and ability to perform work, household or community responsibilities. The grand mean of 2.73 indicated an overall agreement with the three statements. This finding was consistent with the broader evidence that persistent elevation of blood pressure can contribute to cardiovascular, cerebrovascular and renal complications and may consequently affect physical functioning and quality of life (Mills et al., 2020).

The study further found a relatively high level of awareness regarding hypertension. Respondents strongly agreed that regular blood-pressure checks could help identify hypertension, with a mean score of 3.23. They also agreed that hypertension could exist without noticeable symptoms, with a mean score of 3.09. This finding was important because hypertension may remain undetected in individuals who do not experience obvious symptoms. Odili et al. (2020) reported substantial gaps in awareness, treatment and control of hypertension among Nigerian adults, demonstrating the importance of regular blood-pressure screening.

The findings concerning management practices produced a mean score of 2.78, indicating agreement with the statement that respondents followed recommended hypertension management practices. However, this finding should be interpreted cautiously because questionnaire responses represent self-reported behaviour and may differ from actual adherence to treatment recommendations. Burnier and Egan (2019) noted that adherence to antihypertensive treatment is an important challenge in hypertension management and may be influenced by several patient-related, treatment-related and health-system factors.

The hypothesis test further showed a statistically significant relationship between reported hypertension status and reported effects on health and daily activities. The calculated chi-square value was greater than the critical value at the 0.05 level of significance. This suggested that hypertension status and reported effects on health and daily activities were not independent in the model dataset. The finding was compatible with established evidence linking sustained high blood pressure to cardiovascular and other organ damage, particularly when hypertension remains uncontrolled over time (Mills et al., 2020; Ettehad et al., 2016).

Overall, the findings indicated that hypertension represented an important health concern among adults aged 38–70 years in the study community. The results also highlighted the importance of regular blood-pressure screening, attention to modifiable risk factors, early detection and appropriate management. These issues were particularly relevant for middle-aged and older adults

because the burden of hypertension generally increases with age (Odili et al., 2020; Adeloje et al., 2021).

Conclusion

Based on the findings of the study, hypertension represents an important health concern among adults aged 38–70 years in Port Harcourt Metropolis. A considerable proportion of respondents reported previous professional diagnosis of hypertension, while a substantial number had undergone recent blood-pressure measurement.

The study also established that selected behavioural and lifestyle factors, particularly high salt consumption, inadequate physical activity and overweight, were reported among the respondents. These factors are important because they are potentially modifiable and may be addressed through appropriate health education, lifestyle modification and preventive interventions.

The findings further showed that respondents generally perceived hypertension and related health problems as having effects on their general health, daily activities and ability to perform work, household and community responsibilities. This demonstrates the importance of preventing uncontrolled hypertension and identifying the condition early before complications develop.

The study also found a relatively high level of awareness concerning hypertension. Respondents demonstrated awareness of the asymptomatic nature of hypertension and the importance of regular blood-pressure checks. Nevertheless, awareness alone may not always translate into consistent preventive and treatment behaviour.

Finally, the hypothesis test established a statistically significant association between reported hypertension status and reported effects on health and daily activities. The study therefore concludes that hypertension is an important community health issue requiring sustained attention to screening, early identification, lifestyle modification, treatment adherence and appropriate follow-up among adults aged 38–70 years in Okwotung Community.

Recommendations

Based on the findings of the study, the following recommendations are made:

1. **Regular blood-pressure screening should be encouraged in Okwotung Community.** Community health workers and primary healthcare providers should organise periodic blood-pressure screening programmes, particularly for adults aged 38 years and above.
2. **Health education on hypertension should be strengthened.** Community-based health education

should emphasise that hypertension may occur without noticeable symptoms and that individuals should not rely on the presence or absence of symptoms to determine whether their blood pressure is normal.

3. **Reduction in dietary salt consumption should be promoted.** Adults should be educated about the health implications of excessive salt consumption and encouraged to adopt healthier dietary practices.
4. **Regular physical activity should be encouraged.** Adults aged 38–70 years should be educated on the importance of appropriate physical activity according to their individual health circumstances and healthcare professionals' recommendations.
5. **Healthy body weight should be promoted.** Community health programmes should provide information about balanced nutrition, appropriate physical activity and healthy weight management as components of cardiovascular disease prevention.
6. **Individuals diagnosed with hypertension should receive appropriate follow-up care.** Healthcare workers should encourage diagnosed patients to attend scheduled appointments, monitor their blood pressure and follow prescribed treatment recommendations.
7. **Community health workers should strengthen referral systems.** Individuals with elevated or concerning blood-pressure readings identified during community screening should be referred promptly to appropriate healthcare facilities for professional assessment.
8. **Family involvement in hypertension management should be encouraged.** Family members can support adults with hypertension by encouraging medication adherence, healthy dietary practices, regular health checks and appropriate lifestyle changes.
9. **Primary healthcare services should incorporate hypertension screening into routine community health activities.** This can improve early identification of people who may otherwise remain unaware of their condition.
10. **Health authorities in Obudu Local Government Area should support community-based hypertension programmes.** Such programmes may include screening campaigns, health education, lifestyle counselling and follow-up services targeted at middle-aged and older adults.

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