# Assessment of Hypertension Knowledge Among Adults Living in Owerri Metropolises

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*Abstract:*

*Background*: Hypertension is a serious public health issue and a major risk factor for a variety of other illnesses. The hazards of untreated hypertension, the benefits of better control, and poor management techniques are all obstacles to effective hypertensive care. The aim of the study was to assess the level of knowledge of hypertension among adults living in the Owerri Metropolis.

*Methods*: A cross-sectional descriptive study of 201 respondents who were residents of Owerri Metropolis at the time of the study was conducted. Data was collected using a pre-tested interviewer-administered questionnaire. The data was examined with the SPSS version, and the chi-square test was performed to determine the link between demographic characteristics and hypertension knowledge.

*Results*: The study population consisted of 96 (48%) males and 105 (52%) females. 134 (69%) stated that blood pressure of 120/80 mmHg was normal. The main aggravating factors for hypertension identified by participants were excess weight 155 (77%), high salt intake 191 (98), excess alcohol consumption 159 (79%), smoking 181 (90) and excess thinking 129 (64). The respondents identified stroke at 94% (189), heart failure at 91% (183), and heart ache at 72% (145) as health conditions associated with hypertension by the respondents. Very few of the adults had a high (15%) level of knowledge of hypertension.

*Conclusion*: The respondents had enough awareness of hypertension, its consequences, and management options. Females aged 50 and older who are Christians from Igbo have a high level of understanding about hypertension. Furthermore, those without a tertiary degree had a higher level of knowledge. To enhance understanding and reduce the consequences of poorly treated hypertension, targeted health education programmes are urgently needed.

*Keywords*: Hypertension, Risk Factors, Knowledge, Blood Pressure, Adults, Lifestyle

## I. INTRODUCTION

Hypertension is connected to cardiovascular disease, insulin resistance, obesity, glucose tolerance, hyperuricemia, and atherosclerosis [1]. At different rates, hypertension alters the shape and functions of small muscle arteries, arterioles, and other blood vessels and can harm a range of target organs, including the kidney, brain, and eye. It has been associated with the end stage of renal failure and stroke [2, 3, 4].

Hypertension is a common modifiable risk factor for cardiovascular disease, with a prevalence of 25.7 percent in Nigeria [5]. It affects around 1 billion people worldwide and has been named the top cause of death. To meet BP objectives (BP 140/90 mmHg in general; BP 130/80 mmHg in diabetes patients), the majority of people need two or more antihypertensive medications. A patient's ability to attain BP control is influenced by factors other than pharmacological therapy, such as lifestyle changes, doctor inertia, and socioeconomic level [6, 7]. The most common reason for GP visits is hypertension, which is commonly treated in general practise [8]. Hypertension therapy and management research, on the other hand, is rarely done in primary care or on people who are treated in basic care. Primary care quality improvement initiatives use GP-recorded data to improve service quality through GP self-motivation and learning [9, 10, 11, 12]. Combining quality improvement data with data from drug prescription, hospitalization, and socioeconomic registries should provide insight into how hypertension patients are managed in primary care while avoiding some of the disadvantages of clinical trial designs [13].

The underlying reason for increased peripheral vascular resistance cannot be determined in 95% of all cases of hypertension, while genetics, birth weight, and lifestyle variables may play a role in essential hypertension [1]. Secondary hypertension, which accounts for the remaining 5% of hypertension patients, is caused by renal, renal-vascular, or adrenal disorders [14]. Increased age has been proven to alter the likelihood of hypertension [1]. This is likely due to the fact that people are prone to excessive thinking and worrying, which can eventually lead to high blood pressure if not adequately managed and regulated. Many adults, particularly in rural regions, are unaware of the risk factors, symptoms, and treatment options for illnesses such as hypertension. Demographics, economics, public resources, infrastructure, land use, and other socioeconomic factors all have a part in encouraging the prevalence of hypertension. Demographics, economics, public resources, infrastructure, land use, and other socioeconomic factors all

play a role in hypertension prevalence.Despite the availability of pharmaceutical and non-pharmacological treatment regimens for decades, the most recent Nigerian study on hypertension prevalence, awareness, and control found that only 43% of all hypertensive patients achieved blood pressure control [5].

The majority of people require two or more antihypertensive drugs to meet blood pressure objectives (BP140/90 mmHg in general; BP130/80 mmHg in diabetes patients). Other factors, including lifestyle changes, a doctor's inertia [15], and a patient's socioeconomic status [16], have an impact on a patient's capacity to control blood pressure. Despite the availability of pharmacological and non-pharmacological treatment regimens for decades [14], the most recent Danish study on hypertension prevalence, awareness, and management found that only 43% of all hypertensive patients had their blood pressure under control. Hypotensive treatment failure (compliance problem) is caused by a lack of collaboration between the patient and the practitioner [3, 14, 17, 18, 19, 20, 21, 22, 23]. According to studies, one out of every four Nigerians and one out of every three adults worldwide suffers from hypertension [19, 24, 25, 26, 27, 28, 29, 30, 31]. If hypertension is not treated properly, it can have catastrophic implications. Although there are many hypertension management regimens accessible, they all follow the same management principles, such as early treatment and diagnosis of predicted blood pressure measures to avoid permanent and diversified organ damage. Therefore, the aim of the study was to assess the level of knowledge of hypertension among adults living in the Owerri Metropolis.

## II. METHODS

### Study Design and Setting

This study adopted a descriptive survey design. The study area for this study was Owerri City in Imo State of Nigeria. For clarity and to be able to achieve the objectives of this study, this study used respondents in Owerri Municipal. The area is highly populated by students, indigenes, traders, and staffs of institutions. Owing to these, the study area is highly populated and comprise of several adults.

### Study Population

According to census results gathered from the Kings that are ruling the communities, the population of adults (18 years and above) in the area was 2,604.

### Sample Size and Sampling Method

Sample Size

The sample size was determined using Cochran formular. This formular was suited for this research because it gave a desired level of precision, confidence level, and an estimated proportion of the attribute of the population.

$n = n_o + [1+ (n_o − 1)/N]$

Where:

$n_o$ = Cochran's Sample Size Recommendation
N = Population Size
n = sample size

Hence,

$n_o$= 200 (recommended when sample population is greater than 2000)
N = 2604
n = 200 + [1 + (200 (200 – 1)/2604]
n = 200 +1.1
n = 201.1 (which is approximately 201)
n = 201 which is the sample size

### Sampling Method

This study applied simple random sampling in selecting the respondents from selected communities in the study area. This is owing to the fact that taking consideration of all the communities will make the sample population too large for analysis and coverage.

### Data Collection Instrument

The research instrument used in this study was a questionnaire. The questionnaire was designed using closed and open-ended questions. This is a type of research instrument that gathers data from a large sample. The questionnaires were administered to adults in the randomly selected areas. The questionnaire was divided into two categories: Section A and Section B. Section A consisted of demographic data of the respondents, while Section B comprised the questions as regards the knowledge of hypertension, which were answered by the respondents.

### Validity of the Instrument

The data collection instrument, which was the questionnaires, was reviewed and validated by two experts in public health through face validity and content validity.

### Reliability of the research instrument

Reliability of a questionnaire is concerned with the consistency of responses to the researchers' questions. Responses to each question in the questionnaire were correlated with those of other questions in the questionnaire. A few questionnaires were given to a few respondents at Owerri North, which is a city similar to the area of study before the actual study, to determine whether the questions were understood by the respondents or not. The reliability coefficient was 0.7, so it is deemed reliable.

### Data Collection

The researcher sought permission from the authorities of the communities that were randomly chosen. After gaining permission, the questionnaires were administered by the researcher to the respondents (18 years and older). The researcher assured them of confidentiality for the information they provided.

*Techniques for Data Analysis*

The data collected was analysed using descriptive statistics. Data was analysed using the Statistical Package for Social Sciences (SPSS) software programme. A Chi-square was used to ascertain the relationship between demographic variables and knowledge of hypertension.

*Ethics*

First, a consent letter was collected from the Department of Public Health, FUTO. The respondents' consent was sought before administering the questionnaires. The researcher assured the respondents of confidentiality of the information given on the questionnaires. They were assured that all information given would not be used for any other purpose other than educational research.

### III. RESULTS

*The Socio-demographic Characteristics of the Respondents*

Table 1 below shows the socio-demographic characteristics of the respondents of Owerri Municipals. The table disclosed that 96 (48%) of the respondents were males, while 105 (52%) were females. The table showed that 32 (16%) of the respondents were between the ages of 18 and 25, 37 (18%) were between age 26 and 33, 49 (24%) were between age 34-41, 56 (28%) were between age 42-49, and 27 (13%) were aged 50 and above. The table also disclosed that the majority of the respondents, 168 (84%), were Christians, 27 (13%) were Muslims, and 6 (3%) were of other religions. 181 (90%) of the respondents were Igbo, 4 (2%) were Yoruba, while 16 (8%) were Hausa. The table also revealed that 29 (14%) of the respondents were primary school certificate holders, 67 (33%) had secondary school qualifications, 89 (43%) had tertiary education qualifications, while 16 (8%) had no formal education. 81 (40%) of the respondents were self-employed, 109 (54%) were employed, while 11 (5%) were unemployed. Figure 1 below explains the employment status of the respondents. Also, from table 1 below, 98 (49%) of the respondents were married, 86 (43%) were single, while 17 (8%) were divorced.

Table 1: Socio-demographic Characteristics of the Respondents

| Characteristics | Frequency | Percentage (%) |
|---|---|---|
| **Sex** | | |
| Male | 96 | 48 |
| Female | 105 | 52 |
| Total | 201 | 100 |
| **Age (in years)** | | |
| 18-25 | 32 | 16 |
| 26-33 | 37 | 18 |
| 34-41 | 49 | 24 |
| 42-49 | 56 | 28 |
| 50 and above | 27 | 13 |
| Total | 201 | 10 |

| | | |
|---|---|---|
| **Religion** | | |
| Christianity | 168 | 84 |
| Islam | 27 | 13 |
| Others | 6 | 3 |
| Total | 201 | 100 |
| **Nationality** | | |
| Ibo | 181 | 90 |
| Yoruba | 4 | 2 |
| Hausa | 16 | 8 |
| Total | 201 | 100 |
| **Level of education** | | |
| Primary | 29 | 14 |
| Secondary | 67 | 33 |
| Tertiary | 89 | 43 |
| No formal education | 16 | 8 |
| Total | 201 | 100 |
| **Marital status** | | |
| Married | 98 | 49 |
| Single | 86 | 43 |
| Divorced | 17 | 8 |
| Total | 201 | 100 |



Fig 1: Employment status of the respondents
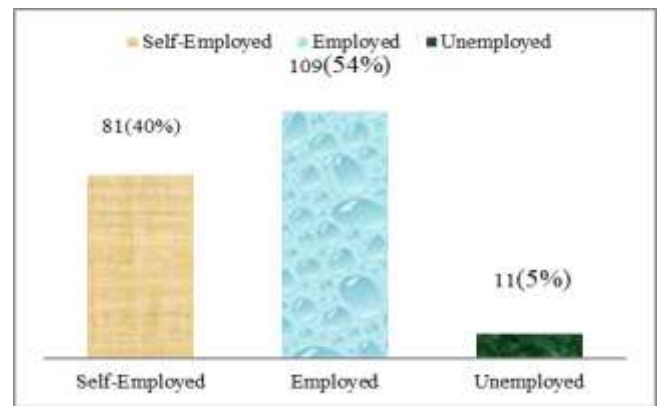
*Health Status of Respondents*

Table 2 shows the health status of the respondents with respect to age. The table disclosed that for the respondents between the age ranges of 18 and 25, 3 (9%) had problems with walking, 19 (59%) had no problem with walking, 4 (13%) had no problem with self-care, and 6 (19%) had no discomfort or pain. The table disclosed that for the respondents between the age ranges of 26 and 33, 7 (19%) had problems with walking, 11 (30%) had no problem with walking, 27% (10) had no problem with self-care, while 3 (8%) had no discomfort or pain. The table disclosed that for the respondents between the age ranges of 34 and 41, 11 (22%) had problems with walking, 19 (39%) had no problem with walking, 16% (8) had no problem with self-care, and 11 (22%) had no discomfort or pain. The table disclosed that for the respondents between the age ranges of

42 and 49, 14 (25%) had problems with walking, 18 (32%) had no problem with walking, 11 (20%) had no problem with self-care, while 13 (23%) had no discomfort or pain. The table disclosed that for the respondents between the ages of 50 and above, 9 (33%) had problems with walking, 7 (26%) had no problem with walking, 8 (30%) had no problem with self-care, while 3 (11%) had no discomfort or pain. Figure 2 explains the factors that can cause hypertension and Figure 3 explains the health conditions associated with hypertension.

Table 2: Health Status of Respondents

| Variable | Frequency | Percentage (%) |
| --- | --- | --- |
| **While indicating your age, please describe your health state** | | |
| **18-25** | | |
| I have problem with walking | 3 | 9 |
| I don't have problem with walking | 19 | 59 |
| I have no problem with self care | 4 | 13 |
| I have no discomfort or pain | 6 | 19 |
| Total | 32 | 100 |
| **26-33** | | |
| I have problem with walking | 7 | 19 |
| I don't have problem with walking | 11 | 30 |
| I have no problem with selfcare | 10 | 27 |
| I have no discomfort or pain | 3 | 8 |
| Total | 37 | 100 |
| **34-41** | | |
| I have problem with walking | 11 | 22 |
| I don't have problem with walking | 19 | 39 |
| I have no problem with selfcare | 8 | 16 |
| I have no discomfort or pain | 11 | 22 |
| Total | 49 | 100 |
| **42-49** | | |
| I have problem with walking | 14 | 25 |
| I don't have problem with walking | 18 | 32 |
| I have no problem with selfcare | 11 | 20 |
| I have no discomfort or pain | 13 | 23 |
| Total | 56 | 100 |
| **50 and above** | | |
| I have problem with walking | 9 | 33 |
| I don't have problem with walking | 7 | 26 |
| I have no problem with selfcare | 8 | 30 |
| I have no discomfort or pain | 3 | 11 |
| Total | 27 | 100 |

*Knowledge of hypertension among adults in Owerri Municipal*

Table 3 below shows the level of knowledge of hypertension of the respondents in Owerri Municipal. From the table, it was revealed that the majority of the respondents, 193 (96%), had heard about hypertension, while 8 (4%) had not. For the proportion that had heard about hypertension, 45 (23%) heard from social media, 9 (5%) heard from worship houses, 91 (47%) heard from hospitals, 17 (9%) heard from gatherings, and 31 (10%) heard from the mass media. The table revealed that 193 (96%) of the respondents had checked their blood pressure before, while 8 (4%) had not. For the proportion that had checked their blood pressure before, for 134 (69%) of them, the normal blood pressure level should be "less than or equal to 120mmHg", for 38 (20%) the normal blood pressure should be 120-139mmHG, and for 21 (11%) the normal blood pressure should be "greater than or equal to 140mmHg". The table also disclosed that 167 (88%) of the respondents knew hypertension to be extremely dangerous if not properly managed and treated, 7 (3%) knew it to be partially dangerous if not properly managed and treated, 5 (2%) knew it not to be dangerous if not properly managed and treated, and 22 (11%) had no idea how dangerous hypertension could be if not properly managed and treated. From the table, the majority of the respondents (157, or 78%) knew tiredness, dizziness, and headache as the symptoms of hypertension; 13 (6%) knew ceased breathing to be the symptom; 9 (4%) had no idea what the symptoms were; and 22 (11%) knew other symptoms to be the symptoms of hypertension. From the table, 155 (77%) of the respondents thought of excess weight as a cause of hypertension, while 46 (23%) did not. 159 (79%) thought of excess alcohol consumption as a cause of hypertension, while 42 (21%) did not. 181 (90%) thought of smoking as a cause of hypertension while 20 (10%) did not. 129 (64%) thought of excess thinking as a cause of hypertension, while 72 (36%) did not. 191 (95%) thought of excess salt intake as a cause of hypertension while 10 (5%) did not. From the table, 189 (94%) of the respondents knew stroke to be a health condition associated with hypertension, while 12 (6%) did not. 183 (91%) knew heart failure to be a health condition associated with hypertension, while 18 (9%) did not. 77 (38%) knew diabetes to be a health condition associated with hypertension, while 124 (62%) did not. 145 (72%) knew heartache to be a health condition associated with hypertension while 56 (28%) did not. 124 (62%) knew all the listed conditions to be health conditions associated with hypertension while 77 (38%) did not. 77 (38%) knew none of the health conditions listed to be health conditions associated with hypertension, while 124 (62%) did not. Lastly, the table revealed that the majority of the respondents, 129 (64%), knew 'going to the hospital' as an adequate measure to be taken when diagnosed of hypertension, 6 (3%) knew 'seeking religious solution' as an adequate measure to be taken when diagnosed of hypertension, 48 (24%) knew 'self-medication' as an adequate measure to be taken when diagnosed of hypertension, and 18 (9%) knew 'doing nothing' as an adequate measure to be taken when diagnosed of hypertension. As displayed in figure 4, the majority of the respondents (132, 66%) had a moderate level of knowledge, followed by those that had low 54, (27%) and high 15, (7%) Figure 4 below explains the general level of knowledge of the respondents.

Table 3. Knowledge of hypertension among adults in Owerri Municipal

| Variable | Frequency | Percentage (%) |
|---|---|---|
| **Have you heard about hypertension?** | | |
| Yes | 193 | 96 |
| No | 8 | 4 |
| Total | 201 | 100 |
| **If yes, through which of the following medium?** | | |
| Social media | 45 | 23 |
| Worship house | 9 | 5 |
| Hospitals | 91 | 47 |
| Gatherings | 17 | 9 |
| Mass media | 31 | 16 |
| Total | 193 | 100 |
| **Have you ever checked your blood pressure level?** | | |
| Yes | 193 | 96 |
| No | 8 | 4 |
| Total | 201 | 100 |
| **If yes, what should be the normal blood pressure level?** | | |
| Less than or equal to 120mmHg | 134 | 69 |
| 120-139mmHg | 38 | 20 |
| Equal to 140mmHg or higher | 21 | 11 |
| Total | 193 | 100 |
| **If not properly managed and treated, how dangerous do you think hypertension can be?** | | |
| Extremely | 167 | 88 |
| Partially | 7 | 3 |
| Not at all | 5 | 2 |
| No idea | 22 | 11 |
| Total | 201 | 100 |
| **Which of the following do you think are the symptoms of hypertension?** | | |
| Tiredness, dizziness and headache | 157 | 78 |
| ceased breathing | 13 | 6 |
| No idea | 9 | 4 |
| Others | 22 | 11 |
| Total | 201 | 100 |
| **Excessive salt intake** | | |
| Yes | 191 | 95 |
| No | 10 | 5 |
| Total | 201 | 100 |
| **Which of the following do you think is an adequate measure to take when diagnosed of hypertension?** | | |
| Go to the hospital | 129 | 64 |
| Seek religious solution | 6 | 3 |
| Self medication | 48 | 24 |
| Do nothing | 18 | 9 |
| Total | 201 | 100 |

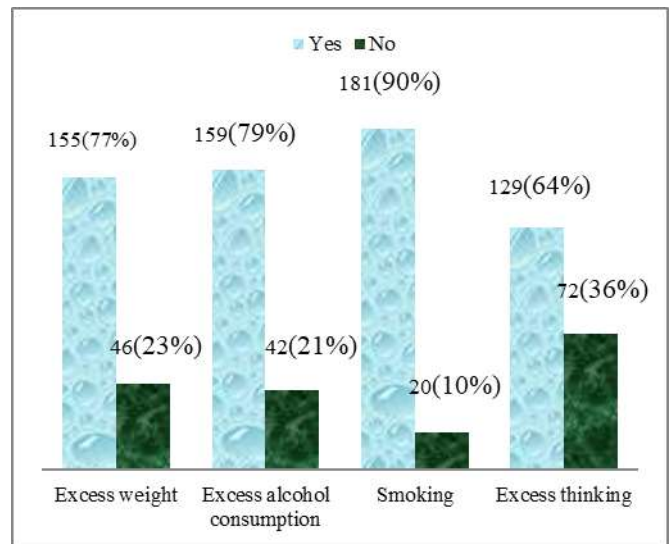Fig 2: Factors that can cause hypertension



Fig 3: Health conditions associated with hypertension
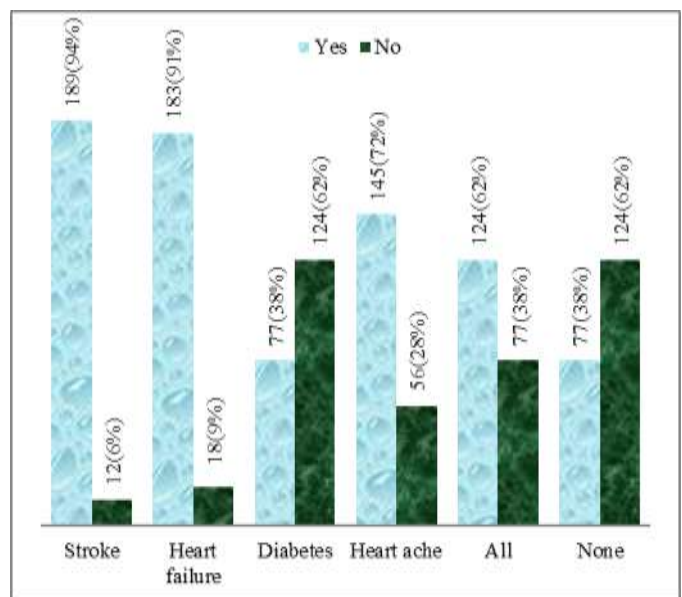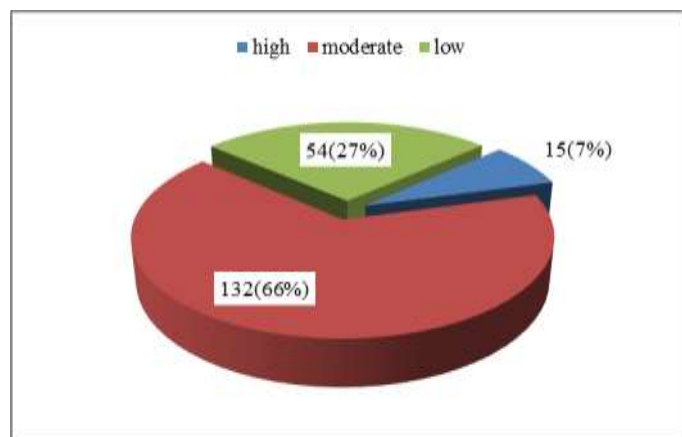


Fig 4: General level of knowledge

*Association between socio-demographic variables and knowledge of hypertension*

Table 4 showed the influence of demographic variables on the level of hypertension knowledge, with all socio-demographic variables having a significant association (p 0.05) with the exception of sex (p = 0.501).Table 4 showed the influence of demographic variables on the level of hypertension knowledge, with all socio-demographic variables having a significant association (p 0.05) with the exception of sex (p = 0.501).Most of the respondents (58%) showed a moderate level of knowledge, whereas females had high knowledge (10%). Across the age groups, respondents who are 50 years and older (11%) had a higher a higher level of knowledge compared to other age groups. Knowledge of hypertension was high (8%) among respondents who are Christians compared to Muslims (7%). Those from the Igbo tribe had high (8%) knowledge compared to other tribes. As regards to level of education and marital status, high knowledge of hypertension was found among adults with tertiary education (9%) and the divorced (18%), (18%), respectively.

Table 4: Association between sociodemographic variables and knowledge of hypertension

|  | High | Moderate | Low | Total | X2 | P-value |
|---|---|---|---|---|---|---|
| **Sex** |  |  |  |  |  |  |
| Male | 5(5%) | 65(68%) | 26(27%) | 96(100%) |  |  |
| Female | 10(10%) | 67(4%) | 28(27%) | 105(100%) |  |  |
| **Total** | **15** | **132** | **54** | **201(100%)** | **1.38** | **p = 0.501** |
| **Age (in years)** |  |  |  |  |  |  |
| 18-25 | 1(3%) | 14(44%) | 17(53%) | 32(100%) |  |  |
| 26-33 | 4(11%) | 30(81%) | 3(8%) | 37(100%) |  |  |
| 34-41 | 3(6%) | 34(69%) | 12(24%) | 49(100%) |  |  |
| 42-49 | 4(7%) | 39(70%) | 13(23%) | 56(100%) |  |  |
| 50 and above | 3(11%) | 15(56%) | 9(33%) | 27(100%) |  |  |
| **Total** | **15** | **132** | **54** | **201(100%)** | **57.22** | **p < 0.001** |
| **Religion** |  |  |  |  |  |  |
| Christianity | 13(8%) | 118(70%) | 37(22%) | 168(100%) |  |  |
| Islam | 2(7%) | 13(48%) | 12(44%) | 27(100%) |  |  |
| Others | 0(0%) | 1(17%) | 5(83%) | 6(100%) |  |  |
| **Total** | **15** | **132** | **54** | **201(100%)** | **78.33** | **p < 0.001** |
| **Ethnicity** |  |  |  |  |  |  |
| Ibo | 15(8%) | 122(67%) | 44(24%) | 181(100%) |  |  |
| Yoruba | 0(%) | 1(25%) | 3(75%) | 4(100%) |  |  |
| Hausa | 0(%) | 9(56%) | 7(44%) | 16(100%) |  |  |
| **Total** | **15** | **132** | **54** |  | **78.33** | **p < 0.001** |
| **Level of education** |  |  |  |  |  |  |
| Primary | 2(7%) | 7(24%) | 20(69%) | 29(100%) |  |  |
| Secondary | 5(7%) | 45(67%) | 17(25%) | 67(100%) |  |  |
| Tertiary | 8(9%) | 74(83%) | 7(8%) | 89(100%) |  |  |
| No formal education | 0(0%) | 6(38%) | 10(63%) | 16(100%) |  |  |
| **Total** | **15** | **132** | **54** | **201(100%)** | **112.19** | **p < 0.001** |
| **Marital status** |  |  |  |  |  |  |
| Married | 8(8%) | 67(68%) | 23(23%) | 98(100%) |  |  |
| Single | 4(5%) | 61(71%) | 21(24%) | 86(100%) |  |  |
| Divorced | 3(18%) | 4(24%) | 10(59%) | 17(100%) |  |  |
| **Total** | **15** | **132** | **54** | **201(100%)** | **57.9** | **p < 0.001** |

## IV. DISCUSSION

Considering the socio-demographic characteristics of the respondents of Owerri municipal, findings from this study showed that the majority of the respondents, 56 (28%), were between the ages of 42 and 49. This goes in line with a statement made in a publication by Scmeider [32], and Sharfi [33], on the age range of adults in a closed study. The study also disclosed that the majority of the respondents, 168 (84%), were Christians. This was as a result of the study area being in the South-Eastern part of the country, which is often dominated by Christians. Based on the health status of the respondents with respect to age, findings from this study disclosed that for the respondents between the age ranges of 18 and 25, 3 (9%) had problems with walking, 19 (59%) had no problem with walking, 4 (13%) had no problem with self-care, and 6 (19%) had no discomfort or pain. This goes in contrast with an earlier study by Buatista *et al.* (2016) on the health-related state of individuals who were diagnosed with hypertension in a facility. The study also disclosed that for the respondents between the age ranges of 26 and 33, 7 (19%) had problems with walking, 11 (30%) had no problem with walking, 10 (27%) had no problem with self-care, and 3 (8%) had no discomfort or pain. In this study, it was demonstrated that among the respondents between the age ranges of 34 and 41, 11 (22%) had problems with walking, 19 (39%) had no problem with walking, 8 (16%) had no problem with self-care, and 11 (22%) had no discomfort or pain. This could be due to location proximity and other related factors. The findings from this study disclosed that for the respondents between the age ranges of 42-49, 14 (25%) had problems with walking, 18 (32%) had no problem with walking, 11 (20%) had no problem with self-care, and 13 (23%) had no discomfort or pain. Findings from the study disclosed that for the respondents between the ages of 50 and above, 9 (33%) had problems with walking, 7 (26%) had no problem with walking, 30% (8%) had no problem with self-care, while 3 (11%) had no discomfort or pain.

Results from this study in terms of the level of knowledge of hypertension of the respondents in Owerri Municipal revealed that the majority of the respondents, 193 (96%), had heard about hypertension. Meaning that the knowledge of hypertension in Owerri Municipal is high and adults are exposed to several knowledge sources of hypertension in their area. A previous study by Bari [34] revealed that the majority of urban dwellers had good knowledge of hypertension. This finding also corroborates with several findings on knowledge of hypertension [3, 4, 35, 36, 1]. According to a publication by European Society of Hypertension and European Society of Cardiology [37], improving knowledge of Hypertension involves various sources of information. For the proportion that had heard about hypertension, findings from this study showed that the majority of the respondents, 91 (47%), had heard from the hospitals. For the proportion that had checked their blood pressure before, findings from this study showed that for the majority of them (134, or 69%), the normal blood pressure

level should be "less than or equal to 120 mmHg". Findings from this study also disclosed that the majority of the respondents, 167 (88%), knew hypertension to be extremely dangerous if not properly managed and treated. Findings from this study showed that the majority of the respondents, 157 (78%), knew tiredness, dizziness, and headache as the symptoms of hypertension. The findings from this study also revealed that the majority of the respondents, 155 (77%), thought of excess weight as a cause of hypertension, 159 (79%) thought of excess alcohol consumption as a cause of hypertension, 181 (90%) thought of smoking as a cause of hypertension, 129 (64%) thought of excess thinking as a cause of hypertension, and 191 (95%) thought of excess salt intake as a cause of hypertension. Findings from this study showed that the majority of the respondents knew stroke 189 (94%), heart failure 183 (91%) and heart ache 145 (72%) to be health conditions associated with hypertension. The findings also revealed that the majority of the respondents, 129 (64%), knew 'going to the hospital' as an adequate measure to be taken when diagnosed with hypertension. This goes in congruence with a finding by Abram [5], conducted in South Africa. All the socio-demographic variables had significant associations (p 0.05) with the level of hypertension, the exception being sex (p = 0.501). This goes against a finding by Kraus and Tao [38] and is in line with a publication by Gu [39] on the association between hypertension and socio-demographic characteristics of participants in a multi-center study. Most of the respondents (58%) showed a moderate level of knowledge, whereas females had high knowledge (10%). Across the age groups, respondents who are 50 years and older (11%) had a higher level of knowledge compared to other age groups. Knowledge of hypertension was high (8%) among respondents who are Christians compared to Muslims (7%). Those from the Igbo tribe had high (8%) knowledge compared to other tribes. In terms of education and marital status, adults with tertiary education (9%) and the divorced (18%) had the most knowledge of hypertension.

## V. CONCLUSION

Residents of Owerri Municipal were well-informed about the disease, its implications, and treatment options. Excessive salt intake, tobacco smoking, excessive alcohol consumption, and excess body weight were all identified as risk factors for hypertension by the participants in this study.

## VI. RECOMMENDATION

A valuable relationship between research teams should also be developed for the dissemination of programmes that have the potential to modify risk distribution at the population level. Also, patients with hypertension require proper information on control measures, adverse effects of hypertension, and management options from their health care professionals. In addition, more study is needed to determine the long-term ramifications and advantages of community intervention initiatives in terms of raising hypertension knowledge.

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