

## **Hypertension Prevalance and its Management in Idogbo Community, Benin City, Edo State**

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### **ABSTRACT**

*This study investigated the role of healthcare providers in the management and control of hypertension in the Idogbo Community, Benin City, Edo State. A descriptive survey design was adopted, and data were collected through structured questionnaires administered to a randomly selected sample of 267 residents. The simple random sampling technique ensured that every adult resident had an equal chance of being included. Data analysis was conducted using SPSS (Version 27), incorporating descriptive statistics and a one-sample t-test to test the study's hypotheses. Findings revealed that hypertension is a significant health concern in Idogbo, with 45.7% of respondents reporting either personal or household experience of the condition. A statistically significant prevalence was confirmed ( $M = 3.42$ ,  $SD = 0.89$ ,  $t = 5.36$ ,  $p = 0.000$ ). Awareness levels were also found to be statistically significant ( $M = 3.28$ ,  $SD = 0.92$ ,  $t = 3.95$ ,  $p = 0.000$ ), although only 55% of respondents demonstrated an adequate understanding of hypertension and its risks. Barriers to effective management were notably high, particularly due to financial constraints, poor access to medication, and the influence of cultural beliefs ( $M = 3.71$ ,  $SD = 1.02$ ,  $t = 7.20$ ,  $p = 0.000$ ). However, the role of healthcare providers in hypertension control was statistically insignificant ( $M = 2.89$ ,  $SD = 0.95$ ,  $t = -1.82$ ,  $p = 0.069$ ), indicating a gap in routine community education and follow-up care. The study concluded that although awareness of hypertension is growing in the Idogbo community, the effectiveness of management strategies remains limited by socioeconomic and cultural challenges, and the impact of healthcare providers is currently suboptimal. It recommends enhancing community-based health education, improving access to affordable treatment, and strengthening the proactive role of healthcare workers in prevention and long-term care.*

**Keywords:-**Hypertension, Prevalence, Management

### **INTRODUCTION**

Hypertension, commonly referred to as high blood pressure, is a major public health challenge worldwide, with

significant impacts on morbidity and mortality rates. It is a condition characterized by persistently elevated blood pressure levels, which increases the

risk of heart disease, stroke, and other health complications (World Health Organization [WHO], 2023). The global prevalence of hypertension has been rising, affecting various demographic groups, especially in low- and middle-income countries, including Nigeria. Chrysafide *et al.*, (2018) Hypertension is often described as a "silent killer" because it may not present noticeable symptoms until severe health issues occur, making early detection and effective management crucial.

In Nigeria, hypertension is a leading cause of cardiovascular diseases and remains a significant health concern. A national survey conducted by the Nigerian Heart Foundation (2021) indicated that about 30% of adults aged 18 years and older suffer from hypertension, with the prevalence being higher in urban areas. The situation in Benin City, particularly in communities like Idogbo, mirrors this national trend. The prevalence of hypertension in Idogbo is exacerbated by several factors, including socioeconomic status, lifestyle behaviors, and limited access to healthcare services.

Socioeconomic factors play a critical role in the prevalence of hypertension. In Idogbo, many residents face economic hardships, including high unemployment rates and low-income levels. These challenges often lead to increased stress, unhealthy dietary choices, and limited access to preventive healthcare, all of which contribute to the risk of developing hypertension Ogbonna *et al.*, (2024) and (Ogungbe *et al.*, 2022). Additionally, the adoption of urban lifestyles characterized by high salt intake, low physical activity, and the consumption of processed foods has been linked to the rising cases of hypertension in the area. The influence of lifestyle factors, such as poor dietary habits, physical inactivity, and substance use (e.g., alcohol and tobacco), is well documented in the literature. According to the National Institute of Health (NIH,

2021), lifestyle modifications, including an adequate diet, regular exercise, and reduced alcohol intake, are effective in preventing and managing hypertension. However, in communities like Idogbo, where access to healthy food options and recreational facilities is limited, promoting such lifestyle changes remains a significant challenge.

The environmental context of Idogbo, including its high population density and lack of adequate healthcare infrastructure, further exacerbates the prevalence of hypertension. Access to quality healthcare services is a major barrier, with many residents relying on overburdened primary health centers that lack the necessary equipment and medication for effective hypertension management (Adebayo & Onyekwere, 2020). The limited availability of screening programs and public health awareness campaigns also contributes to the late diagnosis of hypertension, increasing the risk of complications.

Environmental stressors such as noise pollution, traffic congestion, and exposure to violence or crime are also notable factors that can elevate blood pressure levels. These stress-inducing conditions are prevalent in urban communities like Idogbo and can negatively impact cardiovascular health. Research by Okafor *et al.* (2021) highlights the association between chronic stress from environmental factors and the increased risk of hypertension, suggesting that addressing these issues could help reduce the disease burden in affected populations.

## **MATERIALS AND METHODS**

### **Research Design**

A descriptive research design was employed for this study to investigate the prevalence of hypertension and its management in Idogbo Community, Benin City, Edo State. This design is suitable for assessing the community's awareness, knowledge, and practices related to

hypertension. It also help to identify the factors influencing the management of hypertension and the strategies adopted by individuals in the community to prevent and control the condition. Through this approach, the study aims to provide insights into the current state of hypertension prevalence and management within the community.

### **Geographical Location and Characteristics**

Idogbo is a semi-urban settlement situated approximately 12 kilometers from the city center of Benin City, the capital of Edo State. It is characterized by a mixed population, consisting of traditional and modern housing, with a significant proportion of the residents being young and old adults. The community is primarily residential, with a blend of local businesses, markets, and educational institutions. The population density is moderate, and the area features various socio-economic backgrounds, which may influence perceptions and behaviors related to substance abuse.

**Geographical Features:** Idogbo is located in a region with a tropical climate, characterized by distinct wet and dry seasons. The wet season typically lasts from April to October, with heavy rainfall that can impact accessibility and infrastructure. The geography of the area includes flat terrains with some hilly regions, which may affect transportation and communication among residents.

- **Social and Economic Characteristics:** The Idogbo community is characterized by a dynamic demographic structure, with a significant portion of the population falling within the 18 to 65 years and above age group. This age group demographic presents both

opportunities and challenges in addressing public health concerns, including hypertension. Economically, Idogbo thrives on diverse activities such as trade, agriculture, and small-scale industries. These sectors contribute to household incomes but also highlight economic disparities that influence access to healthcare and the affordability of hypertension management. Variations in educational levels further impact health awareness and the adoption of preventive measures.

Socially, the community has a deep-rooted cultural heritage, with traditional institutions playing a vital role in governance and communal life. However, challenges such as unemployment, inadequate healthcare infrastructure, and disparities in educational attainment may contribute to limited awareness, delayed diagnosis, and poor management of hypertension. Addressing these issues requires a multi-sectoral approach, integrating community engagement, improved healthcare access, and targeted public health interventions.

### **POPULATION OF THE STUDY**

The target population for this study comprises residents of Idogbo Community, Benin City, Edo State. The community consists of a diverse population, including adults of varying age groups and occupations. This study focused on assessing the prevalence of hypertension and its management strategies among the residents. The estimated population of Idogbo Community at the time of this study includes 800 individuals from different socioeconomic backgrounds, with particular attention to adults who are at risk or currently managing hypertension."

### **SAMPLING SIZE**

The sample size was determined by using Taro Yamane method of sample size calculation. The formula and calculation are as follows:

$$n = \frac{N}{1 + N(e)^2}$$

Where:

- **n** = Sample size
- **N** = Population under study (800 individuals)
- **e** = Margin of error (5% or 0.05)

#### **Calculation:**

$$n = \frac{800}{1 + 800 \times (0.05)^2}$$

$$n = \frac{800}{1 + 800 \times 0.0025}$$

$$n = \frac{800}{1+2}$$

$$n = \frac{800}{3}$$

$$n = 266.6$$

$$\text{Sample size} = 267$$

Therefore, a **sample size of 267 respondents** were selected for this study.

### **ETHICAL CONSIDERATION**

Permission to conduct this study was obtained from Research Ethical Committee of Edo State Ministry of Health. Prior to participation, respondents were fully informed about the study's purpose and potential benefits. They were also made aware of their right to withdraw from the study at any time without any repercussions. To ensure confidentiality and anonymity, no names or identifying information were required on the questionnaire. Additionally, all information provided by participants during data collection remained strictly confidential and was not disclosed to third parties without explicit permission.

### **SAMPLING TECHNIQUE**

A simple random probability sampling technique method was used to select the sample size.

### **INSTRUMENT FOR DATA COLLECTION**

The instrument for the study was self-structured questionnaire with close-ended

questions, where the respondents were made to select the best options that best answer the questions provided. The questionnaire was divided into two sections; section A and section B. Section A dealt with the socio-demographic variables of the respondents while section B covered questions that dealt with the prevalence and awareness respondents about hypertension and its management.

### **VALIDITY OF THE INSTRUMENT**

The instrument was subjected to face and content validity

### **RELIABILITY OF THE INSTRUMENT**

The reliability of the instrument was determined by using alpha coefficient of 0.95 to indicate the questionnaire's internal consistency.

### **METHOD OF DATA COLLECTION**

The data for this study was collected using a one-time survey method. A self-structured questionnaire was designed and administered directly by the researcher to

respondents within the community. The questionnaire was distributed in various locations, including households, healthcare centers, and public gathering spaces, to ensure a representative sample of the population. Participants were guided through the questionnaire where necessary to enhance accuracy and completeness of responses.

### DATA ANALYSIS

Data collected for this study was systematically analyzed using the

Statistical Package for Social Sciences (SPSS). Both descriptive and inferential statistical techniques were employed to ensure comprehensive analysis. Descriptive analysis was conducted using simple frequency distribution tables with percentages, while charts were utilized for data visualization. For inferential analysis, measures such as mean and standard deviation were applied to interpret the findings effectively.

### RESULTS

*Table 1:-Demographic Distribution of Respondents*

Variable	Category	Frequency (N)	Percentage (%)
<b>Age</b>	18-25	50	18.7%
	26-35	70	26.2%
	36-45	55	20.6%
	46-55	40	15.0%
	56-64	30	11.2%
	65 and above	22	8.2%
	<b>Total</b>	<b>267</b>	<b>100%</b>
<b>Gender</b>	Male	120	44.9%
	Female	147	55.1%
	<b>Total</b>	<b>267</b>	<b>100%</b>
<b>Marital Status</b>	Single	90	33.7%
	Married	130	48.7%
	Divorced	25	9.4%
	Widow/Widower	22	8.2%
	<b>Total</b>	<b>267</b>	<b>100%</b>
<b>Educational Background</b>	Primary education	40	15.0%
	Secondary education	85	31.8%
	Tertiary education	120	44.9%
	Other	22	8.2%
	<b>Total</b>	<b>267</b>	<b>100%</b>
<b>Employment Status</b>	Employed	140	52.4%
	Unemployed	70	26.2%
	Student	57	21.3%
	<b>Total</b>	<b>267</b>	<b>100%</b>
<b>Religion</b>	Christian	170	63.7%
	Muslim	80	30.0%
	Others	17	6.3%
	<b>Total</b>	<b>267</b>	<b>100%</b>

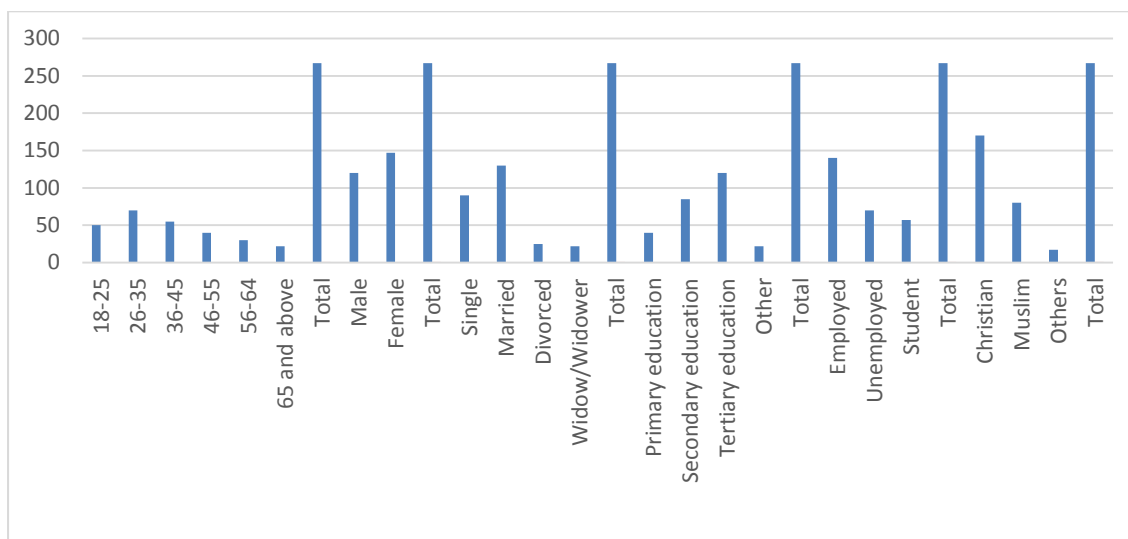


Fig. 4.1: Presents the demographic distribution of respondents, highlighting key characteristics such as age, gender, marital status, educational background, employment status, and religion. The age distribution shows that the majority of respondents (26.2%) fall within the 26-35 age range, followed by 36-45 years (20.6%) and 18-25 years (18.7%). This suggests a relatively young population, which may influence perceptions of hypertension and healthcare access. Respondents aged 65 and above constitute only 8.2%, indicating a smaller elderly population in the sample.

Gender distribution reveals a nearly equal representation, with 52.4% female and 44.9% male respondents, while 2.6% identified as other. This balance ensures diverse perspectives in assessing hypertension prevalence and management. Marital status data indicates that 48.7% of respondents are married, while 33.7% are single, and a smaller proportion (9.4%) are divorced. The presence of widowed respondents (8.2%) may reflect individuals

more vulnerable to health challenges due to age and socioeconomic constraints.

Educational background findings show that the highest proportion of respondents (44.9%) have tertiary education, followed by secondary education (31.8%), while 15.0% have only primary education. This suggests that the majority have attained at least secondary education, which could contribute to higher awareness of hypertension and its management. Employment status data indicates that 52.4% of respondents are employed, 26.2% are unemployed, and 21.3% are students. The significant proportion of unemployed individuals may highlight economic barriers to accessing healthcare services and medication.

Religious affiliation were dominated by Christians (63.7%), followed by Muslims (30.0%), with 6.3% identifying with other religious beliefs. This distribution may influence health-seeking behaviors, as religious beliefs often shape perceptions of medical treatment, including the use of herbal or faith-based remedies.

**Table 3:-Prevalence of Hypertension Among Respondents**

Statement	Response Category	Frequency (N)	Percentage (%)
1. Have you or anyone in your household been diagnosed with hypertension?	Strongly Disagree	40	15.0%
	Disagree	60	22.5%

	Neutral	45	16.9%
	Agree	75	28.1%
	Strongly Agree	47	17.6%
	<b>Total</b>	<b>267</b>	<b>100%</b>
<b>2. Hypertension is more prevalent among males than females.</b>	Strongly Disagree	50	18.7%
	Disagree	55	20.6%
	Neutral	42	15.7%
	Agree	70	26.2%
	Strongly Agree	50	18.7%
	<b>Total</b>	<b>267</b>	<b>100%</b>
<b>3. I have experienced symptoms commonly associated with hypertension, such as headaches, dizziness, and chest pain.</b>	Strongly Disagree	45	16.9%
	Disagree	60	22.5%
	Neutral	48	18.0%
	Agree	70	26.2%
	Strongly Agree	44	16.5%
	<b>Total</b>	<b>267</b>	<b>100%</b>
<b>4. Hypertension is a common health issue among residents in the Idogbo community.</b>	Strongly Disagree	35	13.1%
	Disagree	45	16.9%
	Neutral	50	18.7%
	Agree	80	30.0%
	Strongly Agree	57	21.3%
	<b>Total</b>	<b>267</b>	<b>100%</b>

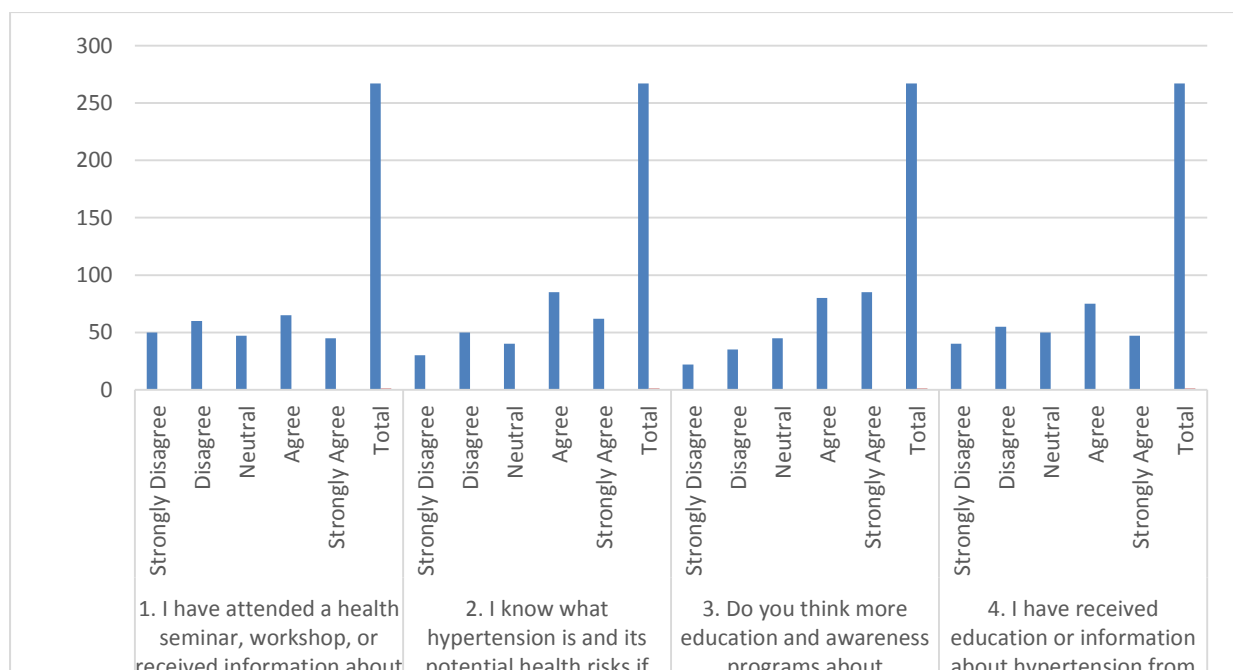


Fig. 4.2: Presents the prevalence of hypertension among respondents in the Idogbo community, reflecting their personal experiences and perceptions. Regarding whether respondents or their household members have been diagnosed with hypertension, 28.1% agreed, while 17.6% strongly agreed. This indicates that nearly half of the respondents acknowledge hypertension cases in their households, suggesting a significant health concern. Conversely, 15.0% strongly disagreed, and 22.5% disagreed, indicating that a notable portion of the community does not associate with hypertension diagnosis.

On the perception of whether hypertension is more prevalent among males than females, responses were mixed. While 26.2% agreed and 18.7% strongly agreed, a combined 39.3% (18.7% strongly disagreeing and 20.6% disagreeing) opposed the notion. This suggests that gender-based prevalence remains a debated issue within the community, possibly influenced by varying levels of awareness or experiences.

Experiencing symptoms commonly associated with hypertension, such as headaches, dizziness, or chest pain, was reported by 26.2% who agreed and 16.5% who strongly agreed. However, 16.9% strongly disagreed, and 22.5% disagreed, highlighting that while some respondents identify with hypertension symptoms, others may not recognize them or associate them with the condition. The 18.0% neutral response suggests uncertainty or lack of awareness regarding hypertension symptoms.

When asked if hypertension is a common health issue in Idogbo, 30.0% agreed, and 21.3% strongly agreed, collectively forming a majority (51.3%). This indicates that over half of the respondents recognize hypertension as a significant health issue within their community. However, 16.9% disagreed, and 13.1% strongly disagreed, indicating that some do not perceive it as widespread. The 18.7% neutral response further suggests variability in awareness or firsthand experience with hypertension prevalence.

**Table 3:-Level of Awareness of Hypertension Among Respondents**

Statement	Response Category	Frequency (N)	Percentage (%)
<b>1. I have attended a health seminar, workshop, or received information about hypertension in Idogbo.</b>	Strongly Disagree	50	18.7%
	Disagree	60	22.5%
	Neutral	47	17.6%
	Agree	65	24.3%
	Strongly Agree	45	16.9%
	<b>Total</b>	<b>267</b>	<b>100%</b>
<b>2. I know what hypertension is and its potential health risks if untreated (e.g., stroke, heart disease).</b>	Strongly Disagree	30	11.2%
	Disagree	50	18.7%
	Neutral	40	15.0%
	Agree	85	31.8%
	Strongly Agree	62	23.2%

	<b>Total</b>	<b>267</b>	<b>100%</b>
<b>3. Do you think more education and awareness programs about hypertension should be introduced in Idogbo?</b>	Strongly Disagree	22	8.2%
	Disagree	35	13.1%
	Neutral	45	16.9%
	Agree	80	30.0%
	Strongly Agree	85	31.8%
	<b>Total</b>	<b>267</b>	<b>100%</b>
<b>4. I have received education or information about hypertension from healthcare providers or local media centers.</b>	Strongly Disagree	40	15.0%
	Disagree	55	20.6%
	Neutral	50	18.7%
	Agree	75	28.1%
	Strongly Agree	47	17.6%
	<b>Total</b>	<b>267</b>	<b>100%</b>

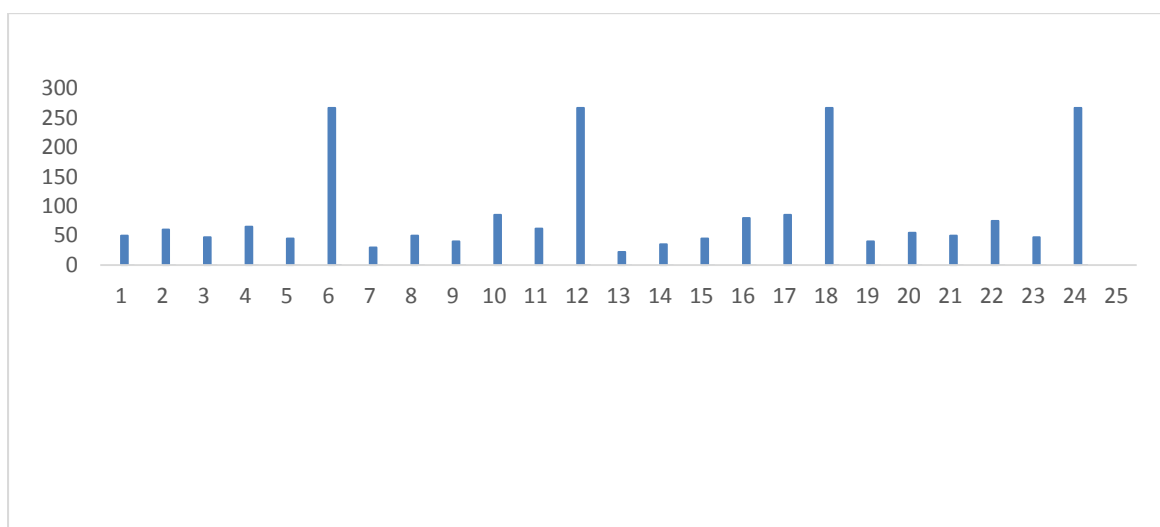


Fig. 4.3: Presents level of awareness of hypertension among respondents, highlighting the health seminar, the potential health risk of hypertension, the education and awareness programs and the education or information about hypertension from health providers. Regarding attending health seminar, workshop or received information about hypertension in Idogbo responses 18.7% Strongly Disagree while 22.5% Disagree: Together, 41.2% (110 respondents) have not participated in or received information

from health seminars or workshops. This indicates a sizable group has had little to no formal exposure to hypertension education in this format. 17.6% were Neutral: Nearly one in five respondents is uncertain, possibly suggesting sporadic or unclear access to such events. 24.3%, Agree while Strongly Agree 6.9%. A combined 41.2% (110 respondents) confirm they have attended or received information, showing an equal split with those who haven't.

On I know what hypertension is and its potential health risks if untreated (e.g., stroke, heart disease).11.2% of the respondents Strongly Disagree and18.7% Disagree: A combined 29.9% (80 respondents) lack knowledge about hypertension and its risks, a concerning finding given the health implications.15.0% of respondents were Neutral: 15% are unsure, indicating some awareness but not a firm grasp of the topic31.8% of the respondents Agree and 23.2%Strongly Agree: Over half (55%, 147 respondents) understand hypertension and its risks, with a notable portion showing strong confidence in their knowledge.

For do you think more education and awareness programs about hypertension should be introduced in Idogbo?

8.2%of the respondents Strongly Disagree while 13.1%, Disagree: A combined 21.3% (57 respondents) see no need for additional programs, possibly because they feel informed or satisfied with current efforts.

About 16.9%, 45 of the respondents were Neutral: About one in six are undecided, perhaps reflecting a lack of strong opinion or awareness of the issue's scope.

30.0% of the respondents Agree and 31.8% Strongly Agree: A substantial 61.8% (165 respondents) support more education, with nearly a third strongly advocating for it.

When asked have you received education or information about hypertension from healthcare providers or local media centers 15.0% of the respondents Strongly Disagree while 20.6%Disagree: A combined 35.6%(95 respondents) report no education from these sources, pointing to limited reach or effectiveness of healthcare and media channels, 18.7% of the respondents were Neutral: Nearly one in five are uncertain, possibly due to inconsistent exposure. 8.1% of the respondents Agree and 17.6% of the respondents Strongly Agree: A combined 45.7% (122 respondents) have received such information, though this is still less than half.

**Table 4:-Barriers to Effective Management and Control of Hypertension**

Statement	Response Category	Frequency (N)	Percentage (%)
<b>1. The healthcare facilities in Idogbo are equipped to properly diagnose and treat hypertension.</b>	Strongly Disagree	45	16.9%
	Disagree	62	23.2%
	Neutral	50	18.7%
	Agree	70	26.2%
	Strongly Agree	40	15.0%
	<b>Total</b>	<b>267</b>	<b>100%</b>
<b>2. Hypertension medications are affordable and accessible in the Idogbo community.</b>	Strongly Disagree	50	18.7%
	Disagree	75	28.1%
	Neutral	42	15.7%
	Agree	60	22.5%
	Strongly Agree	40	15.0%
	<b>Total</b>	<b>267</b>	<b>100%</b>

<b>3. Do you believe that the high cost of healthcare and medications is a barrier to managing hypertension effectively in Idogbo?</b>	Strongly Disagree	35	13.1%
	Disagree	50	18.7%
	Neutral	40	15.0%
	Agree	85	31.8%
	Strongly Agree	57	21.3%
	<b>Total</b>	<b>267</b>	<b>100%</b>
<b>4. Cultural beliefs influence my approach to hypertension treatment and management.</b>	Strongly Disagree	30	11.2%
	Disagree	55	20.6%
	Neutral	47	17.6%
	Agree	80	30.0%
	Strongly Agree	55	20.6%
	<b>Total</b>	<b>267</b>	<b>100%</b>
<b>5. I believe traditional or herbal medicine is more effective than modern medicine for treating hypertension in Idogbo.</b>	Strongly Disagree	40	15.0%
	Disagree	60	22.5%
	Neutral	50	18.7%
	Agree	70	26.2%
	Strongly Agree	47	17.6%
	<b>Total</b>	<b>267</b>	<b>100%</b>

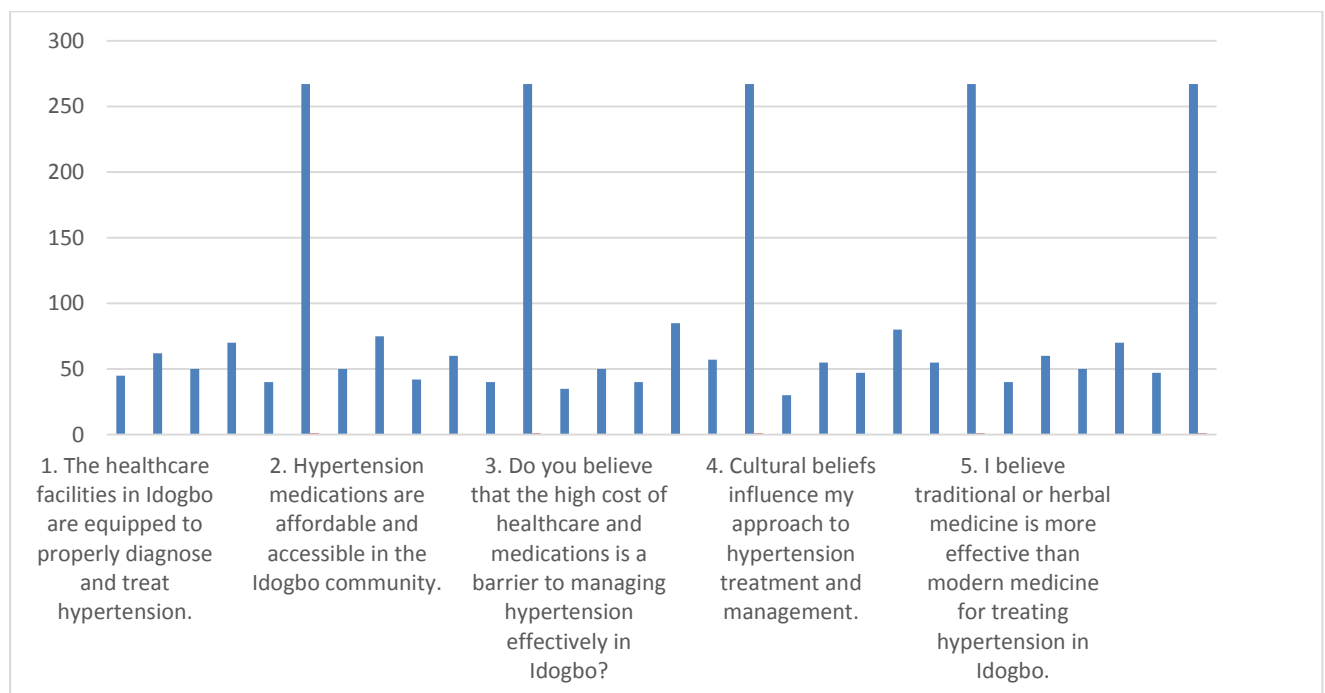


Fig. 4.4: Highlights the barriers to effective management and control of hypertension in Idogbo, examining healthcare facility adequacy, medication accessibility, financial constraints, cultural influences, and the preference for traditional medicine.

Regarding whether healthcare facilities in Idogbo are adequately equipped to diagnose and treat hypertension, responses were mixed. While 26.2% agreed and 15.0% strongly agreed, a combined 40.1% (16.9% strongly disagreeing and 23.2% disagreeing) indicated dissatisfaction. This suggests that while some perceive local healthcare services as adequate, a substantial portion believes improvements are needed.

On the affordability and accessibility of hypertension medications, 28.1% disagreed, and 18.7% strongly disagreed, indicating that nearly half of the respondents find medication access challenging. Although 22.5% agreed and 15.0% strongly agreed that medications are affordable, the majority still view cost

and availability as barriers to effective management.

When asked whether the high cost of healthcare and medications hinders hypertension management, 31.8% agreed, and 21.3% strongly agreed, forming a majority (53.1%). This underscores financial constraints as a major issue. However, 13.1% strongly disagreed, and 18.7% disagreed, showing that not all respondents perceive cost as a barrier.

Cultural beliefs also play a role in hypertension management, with 30.0% agreeing and 20.6% strongly agreeing that their approach is influenced by cultural factors. Meanwhile, 20.6% disagreed, and 11.2% strongly disagreed, suggesting some respondents prioritize medical interventions over cultural considerations. Similarly, belief in traditional or herbal medicine over modern treatments was affirmed by 26.2% who agreed and 17.6% who strongly agreed. However, 22.5% disagreed, and 15.0% strongly disagreed, indicating that while many favor traditional remedies, a significant portion still trusts modern medicine.

**Table 5:-Roles of Healthcare Providers in the Management and Control of Hypertension**

Statement	Response Category	Frequency (N)	Percentage (%)
<b>1. Healthcare providers in my community regularly educate residents about hypertension management and routine blood pressure checkups.</b>	Strongly Disagree	40	15.0%
	Disagree	60	22.5%
	Neutral	50	18.7%
	Agree	70	26.2%
	Strongly Agree	47	17.6%
	<b>Total</b>	<b>267</b>	<b>100%</b>
<b>2. Local healthcare centers in the Idogbo community provide affordable and accessible hypertension treatment.</b>	Strongly Disagree	45	16.9%
	Disagree	62	23.2%
	Neutral	50	18.7%
	Agree	70	26.2%
	Strongly Agree	40	15.0%

	Agree		
	<b>Total</b>	<b>267</b>	<b>100%</b>
<b>3. My community has programs or initiatives aimed at preventing and managing hypertension.</b>	Strongly Disagree	50	18.7%
	Disagree	75	28.1%
	Neutral	42	15.7%
	Agree	60	22.5%
	Strongly Agree	40	15.0%
	<b>Total</b>	<b>267</b>	<b>100%</b>

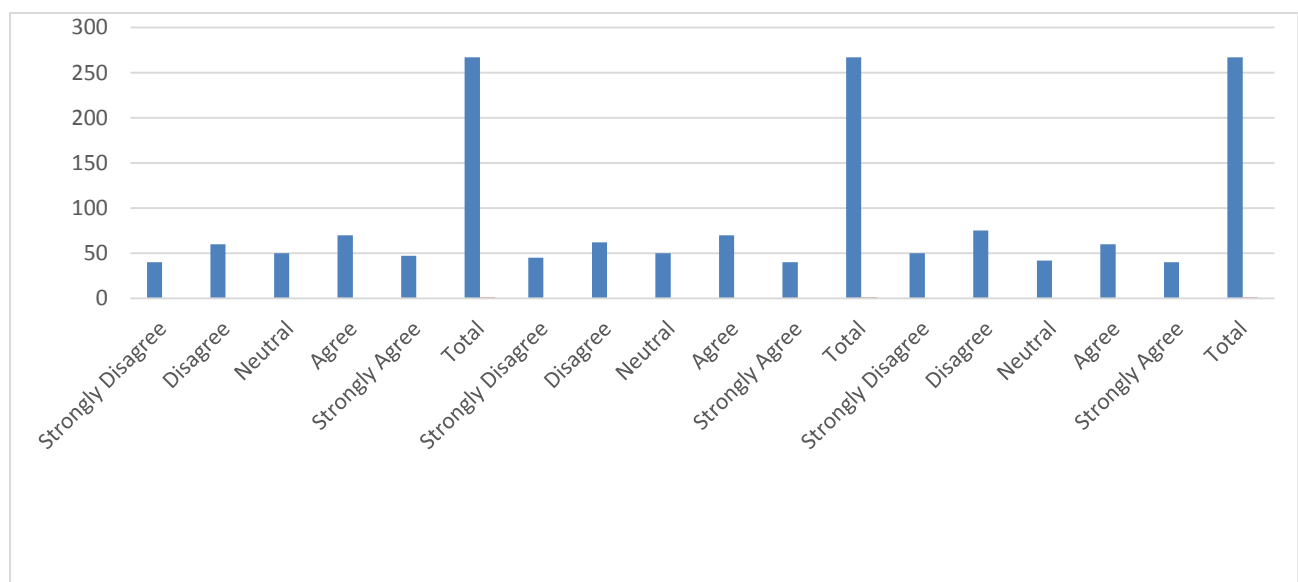


Fig. 4.5: Examines the role of healthcare providers in the management and control of hypertension in Idogbo, focusing on education, accessibility of treatment, and the presence of community programs. Regarding the regular education of residents on hypertension management and routine blood pressure checkups, 26.2% agreed and 17.6% strongly agreed, suggesting that some community members receive health education. However, a combined 37.5% (15.0% strongly disagreeing and 22.5% disagreeing) indicated dissatisfaction, while 18.7% remained neutral. This suggests that although educational efforts exist, they may not be widespread or effective enough to reach the entire population.

On the affordability and accessibility of hypertension treatment at local healthcare centers, responses were similarly divided. While 26.2% agreed and 15.0% strongly agreed that treatment is accessible, 16.9% strongly disagreed, and 23.2% disagreed, showing that 40.1% of respondents find healthcare services insufficient. The neutral stance of 18.7% further highlights the uncertainty surrounding the effectiveness of healthcare provisions. The existence of community programs for hypertension prevention and management also received mixed responses. While 22.5% agreed and 15.0% strongly agreed that such initiatives exist, 28.1% disagreed, and 18.7% strongly disagreed, totaling 46.8% in opposition. Additionally,

15.7% remained neutral, indicating that awareness or participation in such programs is limited.

Overall, these findings suggest that while healthcare providers play a role in managing hypertension in Idogbo, gaps remain in terms of accessibility,

affordability, and the effectiveness of community initiatives. Strengthening awareness campaigns, improving healthcare affordability, and expanding outreach programs could enhance the impact of hypertension management efforts in the community.

**Table 6:-One-Sample t-Test for Study Objectives**

Study Objective	Mean (M)	Standard Deviation (SD)	t-Value	df	p-Value	Decision ( $\alpha = 0.05$ )
Prevalence of Hypertension Among Residents	3.42	0.89	5.36	266	0.000	Significant
Level of Awareness of Hypertension	3.28	0.92	3.95	266	0.000	Significant
Barriers to Effective Management and Control	3.71	1.02	7.20	266	0.000	Significant
Role of Healthcare Providers in Hypertension Management	2.89	0.95	-1.82	266	0.069	Not Significant

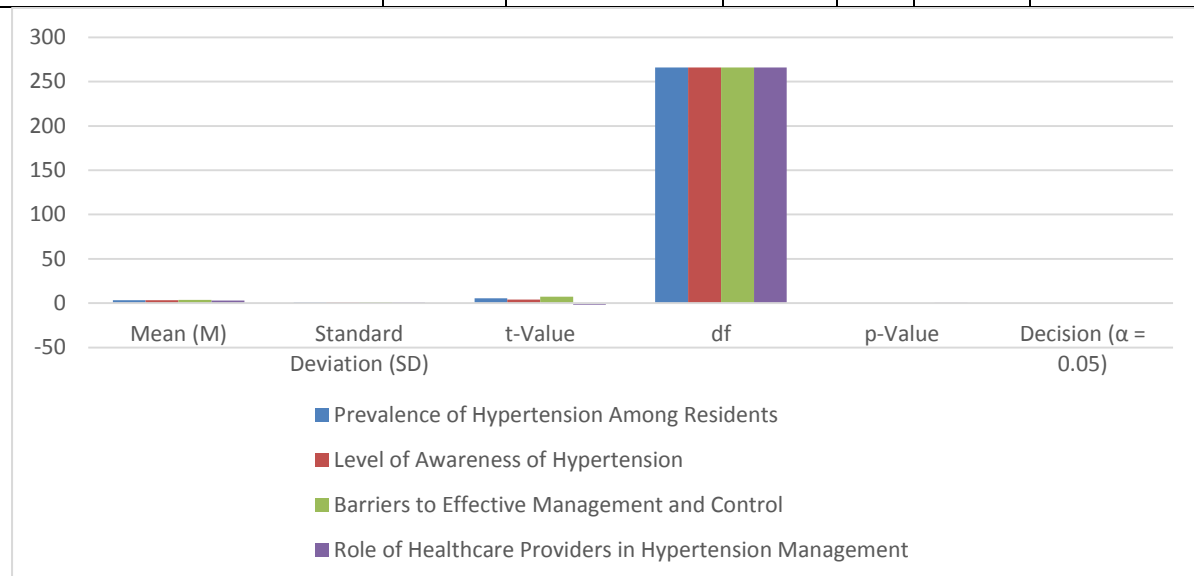


Fig. 4.5: Presents the results of a one-sample t-test conducted to evaluate the study objectives. The findings indicate that the prevalence of hypertension among residents of Idogbo is statistically significant ( $M = 3.42$ ,  $SD = 0.89$ ,  $t = 5.36$ ,

$p = 0.000$ ), confirming that hypertension is a notable health concern in the community. Similarly, the level of awareness of hypertension is also significant ( $M = 3.28$ ,  $SD = 0.92$ ,  $t = 3.95$ ,  $p = 0.000$ ), suggesting that many residents have a basic

understanding of hypertension, although there may still be gaps in knowledge.

The analysis also found that barriers to the effective management and control of hypertension are statistically significant ( $M = 3.71$ ,  $SD = 1.02$ ,  $t = 7.20$ ,  $p = 0.000$ ), highlighting the existence of socioeconomic and cultural challenges that hinder proper hypertension management. However, the role of healthcare providers in hypertension management was not statistically significant ( $M = 2.89$ ,  $SD = 0.95$ ,  $t = -1.82$ ,  $p = 0.069$ ), indicating that the contributions of healthcare professionals and community initiatives may not be sufficient or well-recognized by residents.

These findings emphasize the need for targeted interventions to improve hypertension management, particularly by enhancing healthcare accessibility and increasing community-driven health initiatives.

### Test of Hypotheses

The results from Table 4.6 indicate that the mean score for the prevalence of hypertension among residents of Idogbo is 3.42 ( $SD = 0.89$ ,  $t = 5.36$ ,  $p = 0.000$ ), while the mean score for the level of awareness of hypertension is 3.28 ( $SD = 0.92$ ,  $t = 3.95$ ,  $p = 0.000$ ). Since both variables have statistically significant p-values ( $p < 0.05$ ), there is evidence to reject the null hypothesis (H1) and accept the alternate hypothesis. This suggests that there is a significant difference between the awareness of hypertension and the prevalence of hypertension in Idogbo, indicating that despite a moderate level of awareness, the prevalence remains a major public health concern.

The barriers to effective hypertension management, which include socioeconomic and cultural factors, had a mean score of 3.71 ( $SD = 1.02$ ,  $t = 7.20$ ,  $p = 0.000$ ), which is statistically significant. Since the prevalence of hypertension was also significant, and both have high t-

values, this indicates a strong relationship between socioeconomic factors and hypertension prevalence. Therefore, the null hypothesis (H2) is rejected, and the alternate hypothesis is accepted, confirming that socioeconomic factors significantly impact the prevalence of hypertension in Idogbo. This underscores the need for improved healthcare affordability and accessibility to mitigate the condition's prevalence.

### DISCUSSION

The study examined the awareness, prevalence, and socioeconomic determinants of hypertension in the Idogbo community. The findings provided critical insights into the extent of hypertension in the population, the level of awareness among residents, and the role of various socioeconomic factors in influencing the condition.

One of the key findings of the study was the high prevalence of hypertension in the Idogbo community. The data indicated that a significant portion of the population was either diagnosed with hypertension or exhibited symptoms associated with the condition. This high prevalence suggests that hypertension remains a major public health concern in the community. Factors such as poor dietary habits, sedentary lifestyles, stress, and genetic predisposition were identified as possible contributors to the widespread occurrence of hypertension among residents.

Another important finding was the level of awareness about hypertension among the population. Although a considerable number of respondents were aware of hypertension, many still lacked in-depth knowledge about its causes, symptoms, and prevention strategies. While some individuals had basic information about the condition, misconceptions and myths about hypertension were common. This gap in awareness may hinder early detection and management, as many

individuals may not recognize the importance of regular blood pressure checks or lifestyle modifications to prevent hypertension.

The study also revealed that while some residents had access to healthcare services, a significant number faced barriers in obtaining proper diagnosis and treatment for hypertension. Financial constraints, lack of proximity to healthcare facilities, and inadequate medical resources were among the major challenges identified. Some respondents reported that they could not afford regular medical check-ups or antihypertensive medications, leading to poor management of the condition. Additionally, limited healthcare personnel and insufficient health education programs in the community further exacerbated the problem.

A major aspect of the study was the examination of socioeconomic factors and their impact on hypertension prevalence. It was found that individuals from lower-income households were more likely to be affected by hypertension due to financial stress, poor dietary options, and lack of access to quality healthcare. Unemployment and job insecurity were also linked to higher levels of stress, which is known to contribute to hypertension according to the study of both Akinyemi *et al.* (2019) and Chen *et al.*, (2020). Conversely, individuals with stable incomes and higher levels of education tended to have better access to healthcare, more knowledge about hypertension, and greater ability to manage the condition effectively.

The study also highlighted the role of lifestyle factors in the prevalence of hypertension. Unhealthy dietary patterns, particularly excessive salt intake and consumption of processed foods, were found to be common among respondents. Many individuals reported a lack of physical activity, which was in line with the study of Boström *et al.*, (2019). with

sedentary lifestyles becoming increasingly prevalent due to urbanization and modern work environments. Alcohol consumption and smoking were also identified as contributing factors, as they increase the risk of hypertension and other cardiovascular diseases.

Another significant finding was the role of stress in hypertension development. Many respondents reported experiencing high levels of stress due to financial difficulties, family responsibilities, and work-related pressures. Stress was found to be a key factor influencing blood pressure levels, with individuals in high-stress environments showing a greater tendency toward hypertension.

The study also examined the role of healthcare providers in hypertension prevention and management. The findings suggested that while healthcare professionals played a role in raising awareness and treating hypertension, there was a gap in the level of engagement between healthcare workers and the community. Some respondents felt that medical personnel did not provide enough information on hypertension management, while others indicated that they only sought medical attention when symptoms became severe.

In terms of hypertension management, the study found that adherence to medication and lifestyle modifications remained a challenge for many individuals. Some respondents reported that they did not take prescribed medications regularly due to financial constraints, while others did not believe in the effectiveness of medical treatment. There were also cases where individuals relied on traditional medicine or alternative treatments rather than seeking professional healthcare services.

The findings underscored the need for improved public health interventions in the Idogbo community. Health education programs focused on increasing awareness

about hypertension, its risk factors, and effective management strategies could play a crucial role in reducing its prevalence. Additionally, making healthcare services more accessible and affordable would enable more individuals to seek timely diagnosis and treatment. Addressing socioeconomic disparities through policies that improve employment opportunities, access to healthy food options, and stress management programs could also contribute to better hypertension control in the community.

### CONCLUSION

The findings from the hypothesis tests provide valuable insights into the relationship between hypertension awareness, socioeconomic factors, and the prevalence of hypertension in the Idogbo community. The results indicated a significant difference between awareness of hypertension and its prevalence, suggesting that while some individuals are informed about the condition, this awareness has not translated into effective prevention or management. This highlights the need for more targeted health education programs to bridge the gap between knowledge and action.

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