

## Psychosocial Needs and Coping Strategies Employed By People Living With Hypertension In Yenagoa, Metropolis, Bayelsa State

<sup>1</sup>OMINIGBO, <sup>2</sup>ALBERT-IVOVO JOYFUL, <sup>3</sup>DAMINI, MILICENT MARK.

<sup>1</sup>POSSIBLE. Department of Nursing Science, Bayelsa Medical University, Bayelsa state, Nigeria.

<sup>2</sup>Department of Nursing Science, Bayelsa Medical University, Bayelsa state, Nigeria.

<sup>3</sup>Department of Nursing Science, Bayelsa Medical University, Bayelsa state, Nigeria.

**ABSTRACT:-** Hypertension is a medical term for 'high blood pressure' that choices from 140/90mmHg and above, and is seen as a silent killer with no known symptoms. It is a disease that reduces the lifespan of those affected. Many of those affected requires psychosocial needs and supports, thus they need to employ some forms of coping strategies with their impairments. The study used a cross-sectional descriptive survey design to identify the psychological and social needs and as well as coping strategies employed by people living with hypertension in the selected hospitals, in Yenagoa metropolis of Bayelsa state. 175 hypertensive patients participated in this study. A self-structured questionnaire was utilized in collecting the data. The results revealed that there were numbers of psychosocial needs of people with hypertension including: need for occupational modification, information needs, transportation needs, financial needs, and access to medication needs with these percentages (89.2%,81.7%,81.7% and 63.4%) respectively. Regular checking of blood pressure; taking low salt diets; regular exercise; dietary modification; and smoking cessation were some ways that the participants identified as coping strategies with the following percentages (76.6%,74.9%,70.3%,67.9% and 57.2%) respectively. The results revealed that barriers to coping included: (i)limited/none availability of health care facilities and inadequate number of experts for managing hypertension (100%);( ii) lack of food items for managing hypertension (98.1%), and (iii) unaffordable antihypertensive medications (81.1%). The government has a major role to play by making more functional health facilities available and employ more medical experts that would always be on ground in these facilities towards making sure that hypertensive patients are not left unattended to, since it serves as the first point of call to the wellbeing of its citizens.

**Keywords:** hypertension, coping strategies, people living with hypertension, psychosocial needs.

Total number of words (276)

### TABLE OF CONTENTS

Title page	i
Certification	ii
Declaration	iii
Dedication	iv
Acknowledgement	v
Abstract	vi
Table of Content	vii
<b>CHAPTER ONE: INTRODUCTION</b>	
1.1 Background to the study	1
1.2 Statement of the problem	4
1.3 Purpose of the study	5
1.4 Objectives of the study	5
1.5 Research questions	5
1.6 Significance of the study	6
1.7 Scope of the study	6
1.8 Operational definition of terms	7
<b>CHAPTER TWO: LITERATURE REVIEW</b>	
2.0 Introduction	8
2.1 Hypertension	8
2.1 Socioeconomic impacts of hypertension	9

2.3	Coping strategies employed by people living with hypertension	11
2.4	Psychosocial needs of people with hypertension	12
2.5	Available resources for meeting the psychosocial needs of people living with hypertension	15
2.6	Review of Related Empirical Studies	20
2.7	Theoretical Framework	23
2.8	Summary of Literature Review	26

**CHAPTER THREE: METHODOLOGY**

3.0	Introduction	28
3.1	Research Design	28
3.2	Research Setting	28
3.3	Study Population	29
3.4	Sample size	29
3.5	Sampling techniques	30
3.6	Inclusion criteria	30
3.7	Instrument for data collection	30
3.8	Validity of the instrument	31
3.9	Reliability of the instrument	31
3.10	Method of Data Collection	31
3.11	Method of data analysis	32
3.12	Ethical consideration	32

**CHAPTER FOUR: DATA ANALYSIS AND PRESENTATION OF RESULTS**

4.1	Data analysis and presentation of results	34
-----	---	----

**CHAPTER FIVE: DISCUSSION OF FINDINGS**

5.0	Introduction	41
5.1	Discussion of finding	41
5.2	Implications of the study	54
5.3	Summary/conclusion	57
5.4	Recommendations	57
5.5	Limitations of the study	58
5.6	Suggestions for further study	59
	References	60
	Appendix I	65
	Appendix II	6

**LIST OF TABLES**

Table 4.1:	Demographic characteristics of study respondents	34
Table 4.2:	Psychosocial needs of people living with hypertension	36
Table 4.3:	Coping strategies employed by people living with hypertension	38
Table 4.4:	Availability of resources for hypertension management	40

**I. INTRODUCTION**

**1.1 Background to the Study**

Hypertension is the medical term for high blood pressure (James, Richard, Aminu and Nick, 2015). Whereas, blood pressure itself is the force exerted by the blood on the walls of the blood vessels (James, Richard, Aminu and Nick, 2015). It is known as a raised blood pressure, and of a major challenge to health and wellbeing worldwide, because it is the single most important risk factor for cardiovascular diseases (Ikeoluwapo, alBukun, Onoja and Ndudi, 2016). However, it is sometimes referred to as a long term medical condition in which the blood pressure in the arteries are very high, and cuts across all carders of people, both the rich and the poor. For the fact that symptoms are not noticed early or in time it is called a silent killer (Ikeoluwapo, Ibukun, Onoja and Ndudi, 2016).

Report by WHO suggest that about 40% of people aged more than 25years had hypertension in 2008 worldwide (WHO,2013). Again, statistical figure gave, approximately 7.6 million individuals died prematurely due to hypertension.

According to WHO, the prevalence of the hypertension is highest in African region at 46% of adults aged 25 years and above while the lowest was found in the American region (Lim et al, 2010). High prevalence of hypertension has been reported in some recent studies conducted in Nigeria and it is the most common non-communicable disease in Nigeria (Daniel, Adejumo, Adejumo, Owolabi, Braimoh, 2013).

Hypertension is associated with increased risk of coronary artery disease and is an independent risk factors for cardiovascular and cerebrovascular disease (Wu, Huang and Yang, 2013). The proportion of the global burden of disease attributable to hypertension has significantly increased from 4.5% to 7% (almost 1 billion adults in the year 2010) (Lim, Vos, Flaxman, Shibuya, Adair-Rohani, 2010). This makes hypertension the single most important cause of morbidity and mortality globally and highlights the urgent need of action to address the problem (Lim et al, 2010). It is one of the most important causes of chronic disabilities worldwide and has the ability to disturb patient's quality of life in many areas (Ebadi, Rakhshian, Malmir, Shams and Ghambari, 2011). It affects patient's life in diverse ways (Afzal, Nahid and Maryam, 2017). Factors such as attitudes, beliefs and experiences and some socio-cultural conditions of patients have various roles in the process of treating hypertension (Afzal, Nahid and Maryam, 2017).

The WHO suggests that the growth of the processed food industry has impacted the amount of salt in diets worldwide and that this plays a role in hypertension (Markus, 2018). Normal blood pressure is 120 over 80mmHg but higher than 130 over 80mmHg, meaning that it is from 140 over 90mmHg and above (Markus, 2018). Acute causes of high blood pressure include stress, but can also happen on its own or it can result from an underlying condition, such as kidney disease (Markus, 2018). Unmanaged hypertension can result to heart attack, stroke and other problems, but lifestyle factors are the best approach to overcome hypertension (Markus, 2018).

Until recently, hypertension was mainly associated with more financially grown regions of the world. However, the condition is increasingly emerging in low and middle income countries (Ibrahim and Damasceno, 2012) where health resources are scarce and stretched by high burden of infectious diseases such as tuberculosis, malaria, HIV and where awareness and treatment levels on hypertension control are still low (Ibrahim and Damasceno, 2012). Currently, the worldwide burden of hypertension is greater in low income countries where it affects about 1 in every 5 of the adult population and this is projected to increase, and by 2025, almost 3 out of every 4 people with hypertension will be living in low income countries. The absolute numbers affected by hypertension in low income countries are therefore considerably high and are likely to increase as globalization and economic advancement usher in urbanization and longer life expectancy in these countries (WHO, 2012). There is evidence that indicates that related complication of hypertension and in particular stroke and heart failure are also becoming increasingly more in Africa mostly in Nigeria and these trends have been strongly linked with changes in individual and societal lifestyle such as an increase in tobacco consumption, excessive consumption of alcohol, reduction in physical activity, consumption of diets high in salt and consumption of unhealthy fats and oils (Daniel, Adejumo, Adejumo, Owolabi and Braimoh, 2013).

The global burden of hypertension is drastically going higher and Africa is mostly affected and prevalence of hypertension in Nigeria forms a greater part of the total burden in Africa continent because of the large population of the country currently estimated to be above 170 million (James, Richard, Aminu and Nick, 2015). The decision to engage in particular ways of overcoming the burden of hypertension is influenced by the host of socio-economic variables like sex, age, social status, types of illness, access to health services and quality of services, hence providing knowledge about causation and treatment measures available will go a long way to overcoming disease burdens of hypertension, if prompt attention is being given to those involved or affected by this disease (Oluwatuyi, 2010). This calls for equipping the clients with necessary knowledge to overcome the psychosocial dangers involved with hypertension. Lack of empirical studies has led to a poor understanding of psychosocial needs and coping strategies among people living with hypertension in Yenagoa metropolis, Bayelsa State. Therefore, this study seeks to investigate the psychosocial needs and coping strategies employed by people living with hypertension in Yenagoa metropolis, Bayelsa State.

## **1.2 Statement of Problem**

Hypertension is reportedly prevalent in the developing countries (Ibrahim, Damasceno, 2013). Knowing that one has hypertension predisposes to further multiple anxiety thereby delaying response to treatment. Coming to terms with such a stressful chronic life event with economic hardship and general depreciating poor health facilities in the country makes adopting healthy coping strategies beneficial to both hypertensive individuals and the overall population. Hypertensive individuals experience varied psychosocial needs, resulting to poor health outcomes. With the increasing cases of hypertension which has resulted into greater economic and health burden, with no adequate health care systems to help curb this disease.

The global burden of hypertension is drastically going higher and Africa is mostly affected and prevalence of hypertension in Nigeria forms a greater part of the total burden in Africa continent because of the large population of the country currently estimated to be above 170 million (James, Richard, Aminu and Nick, 2015).

The decision to engage in particular ways of overcoming the burden of hypertension is influenced by the host of socio-economic variables like sex, age, social status, types of illness, access to health services and quality of services, hence providing knowledge about causation and treatment measures available will go a long way to overcoming disease burdens of hypertension, if prompt attention is being given to those involved or affected by this disease (Oluwatuyi, 2010). Bayelsa state is not excluded in the fight against hypertension, since urbanization is gradually overtaking the state, with more influx of more and more people from other areas to the state, with different diseases like hypertension. This study seeks to identify the psychosocial needs as well as coping strategies among hypertensive individuals in Yenagoa metropolis, Bayelsa State, Nigeria.

### **1.3 Purpose of the Study**

This study investigates the psychosocial needs and coping strategies employed by people living with hypertension in Yenagoa metropolis, Bayelsa State.

### **1.4 Objectives of the study**

The specific objectives of the study are to:

1. Investigate the psychosocial needs of people with hypertension in Yenagoa metropolis, Bayelsa State.
2. Identify the coping strategies employed by people living with hypertension in Yenagoa metropolis, Bayelsa State.
3. Identify the available psychosocial resources for meeting the psychosocial needs of people living with hypertension in Yenagoa metropolis, Bayelsa State.

### **1.5 Research Questions**

The following research questions were posed to guide the study:

1. What are the psychosocial needs of people living with hypertension in Yenagoa metropolis, Bayelsa State?
2. What are the coping strategies employed by people living with hypertension in Yenagoa metropolis, Bayelsa State?
3. What are in Yenagoa metropolis, Bayelsa State?

### **1.6 Significance of the Study**

This study may impact positively on health care delivery to adults with hypertension; provide information for health care decision and policies on care of patients with hypertension.

It may also serve as a source of data for further studies on the subject matter. It may also impact on nursing care of people with hypertension as well as nursing education.

Specifically, this study may:

- Expose the limited availability of health care facilities and man powers in the state and will further provide solutions on how these shortcomings can be overcome.
- Help to expose the various psychosocial needs and coping strategies adopted by hypertensive individuals in the study area.
- Serve as a source of information to both the policy makers and in developing policies on care of people with hypertension.
- Motivate academia to carry out more researches on this topic.
- Based on these findings hypertensive treatment centers may be created by the government on the management of psychosocial needs people with hypertension.

### **1.7 Scope of the study**

The scope of this study covers hypertensive people who are attending clinics at the selected health facilities in Bayelsa State. The study was restricted to adults within the ages of thirty-one (31) years and above, and who are attended to in the respective facilities. Two facilities were selected because they are the major referral centres in Bayelsa State, serving as primary, secondary and tertiary referral treatment centres in the state. The study is to investigate their psychosocial needs and coping strategies.

### **1.8 Operational Definitions of Terms**

**Coping Strategies:** These refers to the various ways or methods employed by people living with hypertension in the care of their health to stay healthy in Yenagoa metropolis, Bayelsa State.

**People living with hypertension:** These refers to people having a blood pressure above 140/90mmHg and sometimes unaware in Yenagoa metropolis, Bayelsa State.

**Psychosocial needs:** These are psychological and social responses that people living with hypertension experiences due to social forces that lead to maladaptive behaviors resulting in poor health outcome in Yenagoa metropolis, Bayelsa State.

## II. LITERATURE REVIEW

### 2.0 Introduction

This chapter is discussed under the following: hypertension, the social and economic impact of hypertension, coping strategies utilized by people living with hypertension and the available psychosocial resources for meeting the needs of people with hypertension

### 2.1 Hypertension

Hypertension is a condition characterized by blood pressure that is regularly high (Naish, & Denise, 2014). Blood pressure refers to the force that the blood exerts on the blood vessels. The pressure in the blood depends on an interplay of work done by the heart and the resistance by the blood vessels (Naish, & Denise, 2014). Hypertension that is not controlled or poorly treated is linked to heart failure, coronary artery disease, peripheral vascular disease, vision loss, chronic kidney disease stroke, and dementia (Centre for Disease Control, 2015). Blood pressure is expressed by two parameters, the systolic and diastolic pressures (CDC, 2015). Normal blood pressure, in majority of people ranges within 100 to 130 millimeter mercury (mmHg) systolic and 60 to 80 mmHg diastolic (Poulter, Prabhakaran, & Caulfield, 2015). Ambulatory blood pressure monitoring over a 24-hour period appears more accurate than office-based blood pressure measurement (Poulter, Prabhakaran, & Caulfield, 2015). Hypertension is categorized as primary or essential high blood pressure and secondary high blood pressure (Poulter, Prabhakaran, & Caulfield, 2015). Majority of hypertension cases in the populace are primary high blood pressure, and is attributed to nonspecific lifestyle and genetic factors (Poulter, Prabhakaran, & Caulfield, 2015).

High blood pressure has several risk factors bothering on lifestyle, including consumption of too much salt in diet, smoking, increased body weight and alcohol consumption (Naish & Denise, 2014). The remaining 5 to 10 percent of cases of hypertension are classified as secondary high blood pressure, and its causes are narrowing renal arteries, chronic kidney diseases, endocrine disorders, or the use of birth control pills (Poulter, Prabhakaran, & Caulfield, 2015). Lifestyle changes and medications can reduce blood pressure and minimize further complications. Lifestyle modifications includes decreased salt intake, weight reduction, physical exercise, and balanced diet (Poulter, Prabhakaran, & Caulfield, 2015). If lifestyle modifications are not enough then blood pressure medications are used to further lower the blood pressure (Poulter, Prabhakaran, & Caulfield, 2015).

### 2.2 The Social and Economic Impact of Hypertension

Hypertension is the leading risk factor for death and for disability worldwide. Aside from contributing to the burden of heart disease and stroke, hypertension also contributes to the burden of kidney failure and premature mortality and morbidity. Over 40% of deaths in people with diabetes are caused by increased blood pressure. It is clear that hypertension is a global public health issue (Vanessa, 2016). Despite compelling evidence that hypertension is a public health concern that we cannot ignore, it often fails to attract significant attention. Hypertension rarely causes symptoms, known as the “silent killer”, and many people go undiagnosed for years, with few, if any symptoms of discomfort. Symptoms that can be associated with hypertension include headache, shortness of breath, chest pain, dizziness and nose bleeds, are very generic and cannot necessarily be relied upon to diagnose hypertension and so also go unnoticed (Vanessa, 2016). Often hypertension fails to be picked up until a serious medical problem occurs because the patient is asymptomatic and therefore does not consult a healthcare professional early enough. By then, it can be too late – hypertension can permanently damage eyes, lungs, the heart or kidneys – and of those with malignant, or highly elevated blood pressure, fewer than 10% will survive beyond 1-2 years (Vanessa, 2016).

Once hypertension causes complications, treating these complications entails costly interventions such as cardiac bypass surgery, carotid artery surgery and dialysis, all of which drain individual and government budgets (Vanessa, 2016). An estimated 10% of health care spending is directly related to increased blood pressure and its complications, increasing to as much as 25% of health care spending in Eastern Europe and Central Asia. The African region has the highest prevalence of hypertension among adults aged over 25, implying a massive economic burden for the continent, including the cost of caring for all the complications arising from hypertension such as cerebrovascular disease, ischemic heart disease and congestive heart failure as well as indirect costs such as the lost productivity of workers struck by stroke, heart failure, and ischemic heart disease. Other costs include the lost savings and assets that are foregone when families must meet catastrophic healthcare expenditures, such as those associated with rehabilitation following stroke, or dialysis following renal failure (Vanessa, 2016).

Increasing economic growth and development, accompanied by rapid unplanned urbanization in the developing world, can only serve to increase the prevalence of raised blood pressure, and in turn, lead to populations developing major cardiovascular problems. This is because, as is the case with all non-communicable diseases, behavioural factors play a major role in increasing blood pressure and hypertension therefore serves as a serious warning sign that major lifestyle changes are required (Vanessa, 2016).

The risk of increased blood pressure is clearly related to social status (Reider and Thomas, 2014). The risk factors to hypertension include: low income, low education, type of profession performed by the individual and migration status (Reider and Thomas, 2014). Illness can therefore lead to disadvantages in terms of education and career opportunities because people of higher social class always find it easier to meet up with their life's demands (Reider and Thomas, 2014).

### **2.3 Coping Strategies Employed by People Living with Hypertension**

The literature review portrays a reasonable picture of the role of certain coping strategies in developing hypertension. Making a diagnosis of hypertension in an individual could be regarded as a major challenge, and is capable of increasing its burden (Aina, Ajayi, Kumolalo, & Inubile, 2016). Therefore, individual with hypertension are expected to develop strategies that would enable them cope with the condition.

The outcome of management of hypertension are been influenced by the strategies employed by those living with hypertension in coping with the disease (Aina, Ajayi, Kumolalo, & Inubile, 2016). Hypertension affects an individual mental functioning and acuity, as it does the physical physiological functioning. The disease is worsened by psychological factors, patient's lifestyle as well as some physical risks (Fariborz, Tayebbeh, Ali, & Shahin, 2015).

Hypertension is poorly controlled in many patients, and the situation can be attributed to either low financial status or ignorance towards the care of the disease (Heymann, Liora, Zucker, Chodick & Shalev, 2012). According to Markus, 2018, the following healthy lifestyle choices are essential in order to avoid hypertension: Maintaining a healthy weight, eating of balanced diets, low salt consumption, regularly exercise, alcohol reduction and regular checking of blood pressure.

**Maintaining a healthy weight:** People who are overweight are encouraged to lose weight, whereas those weighing normal weight should stop increasing more weight. In overweight people, weight reduction is essential to help avoid hypertension (Markus, 2018).

**Eating of a balanced diet:** Eating healthy diets can help to control the blood pressure.

Eating of plenty fruits and vegetables that are rich potassium, and reducing consumption of excess calories, fat, and sugar. Engage in diets to stop Hypertension, which has been revealed to help manage blood pressure (Markus, 2018).

**Low salt consumption** has been acknowledged as capable of maintaining blood pressure within normal parameters. Consumption of higher sodium increases the blood pressure (Markus, 2018). **Alcohol reduction:** consuming too much is capable of increasing blood pressure (Markus, 2018).

**Regular checking of blood pressure:** Regular monitoring of blood pressure is very necessary because hypertension is usually symptomless, and is identified often with blood pressure readings (Markus, 2018).

### **2.4 Psychosocial needs of people living with hypertension**

Hypertension is of the health challenges in the United States, and also in the developing countries like Nigeria with approximately 50 million people having this disease. This disease is mostly prevalent in the African American population than in the Caucasian population. According to the National Stroke Association in 2011, approximately 40% of African Americans have hypertension, compared with 28% in Caucasians. It is important for health care personnel to be proactive in detecting hypertension in high risk populations, such as Nigeria, and aggressive in managing and treating this disease. To reduce and prevent rates of Africans living with hypertension, education about illness management and the availability of resources, healthcare professionals should play the primary role in order to boost up the health care attention given to people living with hypertension.

A psychosocial needs assessment may aid healthcare personnel to identify the needs of a population so that care and health education may be modeled to better meet the populations needs. Mondel, Morganand Dutcher, 2007 explored the illness related needs of adults and stated some categories of psychosocial needs. The psychosocial needs of those living with hypertension may impact quality of life positively if their needs are met. By identifying these types of needs, researchers can go a long way to determine specific resources from which people with hypertension may benefit: informational needs, practical needs, supportive needs, spiritual needs, occupational needs, social isolation and marital needs and financial needs.

**Informational needs:** Informational needs focus on obtaining knowledge needed to manage hypertension.

These include information about treatment of the disease, lifestyle changes, and ways to manage symptoms when hypertensive. Specific information needs relate to managing side effects of antihypertensive medications, decreasing chances of complications, promoting healthy eating patterns, and using alternative or natural treatments (Mondel, Morgan & Dutcher, 2007).

**Supportive needs:** Supportive needs pertain to stress management, emotional support, coping support, and having connections with others. Individuals with this category of need may want ideas about how to cope with feelings bad experience and may share those feelings and thoughts with people who are close to them. Sometimes those living with high blood for a long duration without having any support from anyone makes them feel greatly worried.

Also, identifying other individuals who are hypertensive might provide a means of support (Mondel, Morgan & Dutcher, 2007).

**Spiritual needs:** these needs may be important to members of the family and community, and they may need help with access to them. Individuals may want help finding someone with whom to talk to about finding peace of mind, the meaning of life, or discussing death and dying issues.

Locating places of worship may be beneficial to these types of individuals (Mondel, Morgan & Dutcher, 2007).

**Occupational needs:** Many adults spend a part of their lives at work, and this chronic job stress can have a powerful negative impact on health. According to the occupational stress model, the combination of both the increase demand and decrease control, referred to as high strain, produces the most stress (Perry and Pescosolido 2010).

In general, the effects of job-strain on the continues rise in blood pressure is seen to be stronger in men than among women (Carnethon, Evans, Church, Lewis, Schreiner, and Jacobs, 2010). The reasons for this difference are not clear, but one possible explanation is that the specific aspects of work that are stressful for men and women may differ (Perry and Pescosolido 2010). **Social isolation and marital needs:** social isolations have been regularly linked to cardiovascular diseases and deaths (Jae, Heffernan, Yoon, Park, Carnethon, and Fernhall, 2012). It has also been observed that isolation has a nexus with delayed post-stress blood pressure recovery (Palatini, Bratti, Palomba, Saladini, Zanatta, & Maraglino (2010), which is related to higher risk of hypertension. Loneliness, which reflects a discrepancy between ones actual and desired level of social connectedness, has also been linked to cardiovascular dysfunction and reactivity to stress (Pouliou, Ki, Law, Li, & Power, 2012) though its influence on hypertension risk has not yet been ascertained. Among these various components of the social network, it is seen that marriage regularly plays the major relationship in people's lives. Those married are seen to be experiencing better health outcomes than those who are not yet married (Sun, Zheng, Detrano, Zhang, Xu, & Li, 2010) because of the different sources of support given to them by their couples (Thawornchaisit, de Looze, Reid & Seubsman, 2013).

**Financial needs:** Numerous indices of low socio-economic status has regularly been identified, and is popularly seen that educational attainment, occupational status, and income; others include social class, social status, and neighborhood characteristics. Although, this may differently affect various outcomes of individual's health (Williams & Thompson, 2013). Low socioeconomic status is also a factor that is capable of causing blood pressure to rise of the limited resources at the disposal of that individual (Guo, Zou, Zhang, Li, Zheng and Sun, 2011) and may delayed blood pressure recovery because hypertensive patients are sometimes faced with financial challenges, some cannot even pay for their medical bills, while others cannot even buy their drugs when diagnosed to be hypertensive (Palatini, Bratti, Palomba, Saladini, Zanatta, and Maraglino, 2010).

## **2.5 Available resources for meeting the needs of people with Hypertension**

Health care delivery is critical for diagnosis and care of chronic diseases, like hypertension, but its role is limited. Multiple social factors including social support system, Health Care facilities, Food items for reducing/managing hypertension, Antihypertensive medications to hypertension diagnosis and control among older adults (Perry and Pescosolido, 2010) are some resources available for managing people living with hypertension.

There is also an evidence that healthy lifestyle behaviours associated with hypertension management such as health care utilization, physical activity, and avoidance of too much consumption of alcohol and tobacco, because these serve as factors through which blood pressure can be controlled (Perry and Pescosolido 2010). Health Care facilities: Many patients see hypertension as an important disease, and only reports taking medication only when symptomatic.

**Qualified doctors and nurses** in both the private and government hospitals are the critical players in diagnosing hypertension. Many patients follow three pathways in in the control of their hypertension: utilization specialized hospitals for acute care, utilization of private hospitals and local pharmacy for minor symptoms of hypertension, and the identification of hypertension unexpectedly in the process of them being treated for other disease conditions (Naheed, Haldane, Jafar, Chakma, and Legido-Quigley, 2018).

Challenges include lack of support systems that would help in screening communities for hypertension qualified and designated healthcare personnel, keeping the patients waiting for a long time, and the inadequacy of supplies for treatment of hypertension. It is also appropriate community-health worker's scope to be expanded in the dissemination of information about chronic disease to improve patient pathways to hypertension care in the rural communities in those living with hypertension (Naheed, Haldane, Jafar, Chakma, and Legido-Quigley, 2018).

**Antihypertensive medications:** Hypertension has always been a threat to the health of many people, within and outside Africa, and is identified as a leading cause of premature death. Hypertension is seen as a risk factor for cardiovascular and cerebrovascular diseases that is modifiable, because when proactive measures are taken towards its management its threat can be avoided. Despite evidence on the efficacy of antihypertensive medication used for the control blood pressure and prevention of death, a large number of individuals have not

been diagnosed and treated, especially in those living in places that are of resource-constrained (Naheed, Haldane, Jafar, Chakma, and Legido-Quigley, 2018). It has been identified that blood-pressure-lowering medications are effective in decreasing the deaths arising from hypertension and other cardiovascular diseases (Naheed, Haldane, Jafar, Chakma, and Legido-Quigley, 2018).

However, a larger number of people living with hypertension still remain undiagnosed, untreated, and uncontrolled, most especially in disadvantaged developing countries (Naheed, Haldane, Jafar, Chakma, and Legido-Quigley, 2018). An added problem is that hypertension is mostly symptomless and can only be detected through screening. Similarly, adherence among hypertensive patients is reportedly low, with some studies suggesting that up to 80% of hypertensive patients have low adherence to medication (Naheed, Haldane, Jafar, Chakma, and Legido-Quigley, 2018). Hypertension is a disturbance in hemodynamic function characterized by persistent abnormal increase in systemic blood pressure, whether it is diastolic or systolic, above the level of normal pressure of 140/90 mmHg. An uncontrolled blood pressure has the chances of leading to other cardiovascular diseases like stroke or coronary heart diseases (Ekwunife, Okafor, Ezenduka, and Udeogaranya, 2013).

There are so many available drugs for the control of hypertension, but its affordability is being seen as a threat for majority of people in Nigeria. (Ekwunife, Okafor, Ezenduka, and Udeogaranya, 2013). Recently, four classes of antihypertensive drugs have been identified by the hypertension guidelines: thiazide diuretic, beta-blockers, angiotensin converting enzyme inhibitors, and calcium channel blockers, and they are described as very effective when compared to the antihypertensive medications.

These antihypertensive formulations are seen to be the mostly used antihypertensive medications used in Nigerian hospitals (Ekwunife, Okafor, Ezenduka, and Udeogaranya, 2013). Social Support system: So many researches has demonstrated that social relationships are associated with better mental and physical health in hypertensive people (Thoits, 2011).

Social network boosts up self-esteem, and this offers the benefit of decreasing physiological reactivity or enhanced immune function to the health of people with hypertension. And when these social relationships provide access to resources like information and social support, they can also shape health-related behaviors and improves their responses to stress (Thoits, 2011).

This is especially imperative with aging, which is usually laden with several stressful transitions like retirement, bereavement, and occurrence of other health problems (Crimmins & Beltran-Sanchez, 2010). Social networks can also be beneficial for hypertension diagnosis by providing access to social support. However, not all network ties are supportive.

Family members plays the role of locating and making an appointment with the physicians and provision of transportation so earlier diagnosis could be made. The provision of healthy foods and assistance with other lifestyle changes such as increasing physical activity can create a context that promotes disease management (Rosland and Piette 2010).

**Food items for reducing/managing hypertension:** Several studies have identified hypertension-related diseases and complications as the major cause of sudden deaths in Nigeria. However, researchers have shown that lifestyle modifications including the regular intake of local spices like garlic, beetroot, Zobo and banana, and foodstuffs may reduce the risk of developing the condition and help in managing it in persons already affected (Abimbola and Ambrose, 2017).

Hypertension, or chronically elevated blood pressure (systolic/diastolic) greater than and equal to 140/90 mmHg at the brachial artery), is a multifactorial condition implicated in the development and progression of cardiovascular disease. Hypertension is among the most important modifiable risk factors for cardiovascular disease, and its complications such as strokes, heart attack and kidney failure are on the increase (Abimbola and Ambrose, 2017).

Researchers have found that garlic, particularly in the form of the standardizable and highly tolerable aged garlic extract, has the potential to lower blood pressure in hypertensive individuals similarly to standard blood pressure medication, via biologically plausible mechanisms of action (Abimbola and Ambrose, 2017). Aged garlic extract, which contains S-allylcysteine as the bioactive sulfur compound, in particular is standardizable and highly tolerable, with little or no known harmful interaction when taken with other blood pressure-reducing or blood-thinning medication (Abimbola and Ambrose, 2017).

Researchers have also found that banana contains phytochemicals, thus its intake reduces blood pressure significantly among hypertensive individuals (Abimbola and Ambrose, 2017). It is used in diarrhoea (unripe), dysentery, intestinal lesions in ulcerative colitis, diabetes (unripe), uremia, nephritis, gout, hypertension, cardiac disease. Apart from effect in blood pressure, banana inhibits atherosclerosis and gallstones in vivo. Banana contains large amounts of potassium.

Other herbs for treating hypertension includes: soybean, tomato, moringa, scent leaf, ginger (Abimbola and Ambrose, 2017). The bulbs of garlic are blended with honey for the purpose of hypertension. The unripe rind of pawpaw is peeled and soaked in water and after three days, a cup is taken daily. The leaves are also used

for treating hypertension (Abimbola and Ambrose, 2017). Leaves of avocado pear are cut into pieces, dried and made into tea, for the management of hypertension. The cotyledons of avocado pear seed are cut into pieces, dried and grinded into powder. A dessert spoonful in 200ml hot water taken after meals gives relieve for the ailment. Guava leaves are soaked in salt water, washed and squeezed and product made up with fresh water to give a greenish liquid that is taken, one glass two times daily for one week to increase blood level and offer protection against heart attack. Also, the fresh leaves of bitter are chewed and swallowed or ground, or stirred in water, and the liquid taken, to manage hypertension. Studies have also shown that breadfruit that the leaf extract decreases the tension of phenylephrine-stimulated isolated guinea pig aorta rings by 15 to 35 per cent (Abimbola and Ambrose, 2017). Tomato extract contains carotenoids, such as lycopene, beta carotene, and vitamin E, which are known as effective antioxidants, to inactivate free radicals and to slow the progress of atherosclerosis. The extract of extract of tomato modestly reduces blood pressure in patients with mild, untreated hypertension Tomato extract contains carotenoids, such as lycopene, beta carotene, and vitamin E, which are known as effective antioxidants, to inactivate free radicals and to slow the progress of atherosclerosis. The extract of extract of tomato modestly reduces blood pressure in patients with mild, untreated hypertension Tomato extract contains carotenoids, such as lycopene, beta carotene, and vitamin E, which are known as effective antioxidants, to inactivate free radicals and to slow the progress of atherosclerosis. The extract of extract of tomato modestly reduces blood pressure in patients with mild, untreated hypertension Tomato extract contains carotenoids, such as lycopene, beta carotene, and vitamin E, which are known as effective antioxidants, to inactivate free radicals and to slow the progress of atherosclerosis.

## **2.6 Review of Related Empirical Studies**

Researches have been reported on the psychosocial needs and coping strategies among people with hypertension. Those related to this study are reviewed and presented below.

In a study done in 2016 by Aina, Ajayi, Kumolalo, and Inubile in Nigerian tertiary health institution on the Coping strategies and blood pressure control among hypertensive patients showed that the leading coping strategies among the subjects were in the problem solving and social contact with a reduction in blood pressure. It was also seen that there was an association between the type of coping strategy and attainment of target blood pressure, and that marital status and the level of education were of the same type of coping. The Design Method was a descriptive study with a total sample of 265 subjects and the method for analysis was SPSS Version 17. This showed that there is a low attainment of the blood pressure targeted that was observed among the study population. Patients factor needs to be included in the management of hypertension in order to achieve better control.

Irene, Frances, Samuel and Danquah, (2014), in another study on the assessing symptoms of anxiety, depression and stress on antihypertensive medication adherence. Hospital-based cross-sectional study involving 400 hypertensive patients was carried out in two tertiary hospitals in Ghana. Data were gathered on patient's socio- demographic characteristics, anxiety, depression and stress symptoms, spiritual beliefs, and medication adherence. About 56% of patients experienced symptoms of anxiety, 20% stress and 4% depression A significant relation was observed between spiritual beliefs and anxiety.

Agyei, Nicolaou, Boateng, Dijkshoom, Born, and Agyemang, (2014), in another study on the relationship between the psychosocial needs and hypertension among Ghanaians. Data were gotten from structured interviews along with medical examination among 212 participants from a cross-sectional study. Blood pressure of participants was measured with an automated digital blood pressure device. The psychosocial stress participants were assessed by questionnaires on the perceived level of discrimination, financial problems and their depressive symptoms. The result shows that the prevalence of hypertension was 54.7%, two thirds of the study population experienced a moderate (31%) or high (36%) level of discrimination and 20.0% of the participants had mild depressive symptoms, while about 9% had moderate depressive symptoms. It also showed that the prevalence of financial stress was 34.8%.

Anyan and Knizek (2018) in another study to know the role of religious faith, belief and practice systems in the coping mechanisms and strategies of essential hypertension patients in Accra, Ghana. Six participants were recruited for participation, and was observed that five were Christians and one was a Muslim. Interviews were conducted and interpretative phenomenological analysis was used to analyze the data. The results showed that the religious faith, beliefs and practices were utilized as coping resources. Deferring-collaborative style of religious coping was found to be used by the participants because an avoidance strategy for them which protected them from consciously confronting their illness. It was also seen that religious faith and beliefs also give the participants a high level of coherence that enabled them to manage and overcome their stress, and this also reflect on their external and internal resources to effectively promote their coping ability and to functionally adapt in promoting their health.

Mushtaq, Mamoona; Najam, Najma (2015), in another study on the role of certain coping strategies in developing hypertension. The design was a Cross sectional research design. A sample of (N = 400) outdoor

hypertensive males and females between ages 30-60 were taken from 3 hospitals. Chi-square and logistic regression analysis were carried out. The result shows Significant positive correlation of hypertension with active coping, substance use, instrumental support, positive reframing, acceptance, and self-blame was found and active coping, acceptance, instrumental social support and self-blame coping strategies appeared as significant predictors of hypertension.

## **2.7 Theoretical Framework**

Nursing theories frame, explains the practices of nursing. Theories play an important role in nursing research. Theories and models were among the most useful tools utilized by health educators in their course to tackle challenges of health problems. Amongst other theories that explains the psychosocial needs and coping strategies that hypertensive individuals employed, is the Roy's Adaptation model, developed in 1976 by Sister Callista Roy, which was chosen for the study. Its choice is because it helps the researcher to address the psychosocial needs of people with Hypertension and the various strategies employed in an attempt to stay healthy. The model views an individual as a set of interrelated systems (biological, psychological and social). It posited that the individual endeavors continually to maintain a balance between various systems and the outside world. Individuals strives continuously to live within a unique circle in which he or she can adequately cope. This model comprises of four domain concepts which are person, health, environment, and nursing.

According to Andrews & Roy (1991), a person can be described as representation of a single individual or a group of individuals. The model considers a person as a biopsychosocial being that is constantly interacting with the changing environment. The **person** is seen as an open, adaptive system who makes use various coping skills to deal with stressful situations.

**Environment** in the model refers to all conditions and circumstances that influences the development, lifestyle, behaviour and health of the person". The term stressors, in the model is regarded as stimuli. Residual stimuli are another term that is also used describe stressors. According to Roy, health and illness are on a continuum, which has many different states or degrees. She stated that health is a process of being and becoming integrated with the whole person. The goal Roy's model in nursing is promotion of the adaptive skills in an individual, thereby contributing to the person's health, quality of life and dying with dignity" (Andrews & Roy,1991). Basic to

Roy's model are three concepts, which are the human being, adaptation, and nursing.

A human being in the model is a person, biopsychosocial being who is constantly interacting with the milieu. The goal of interaction of human being according to the model is through adaptation and it involves two key internal processing subsystems, namely; **cognator** and regulator. These subsystems are used by human beings to cope with stimuli that emanates from both the internal and external environments. The **regulator** primarily functions via the autonomic nervous system and involving the endocrine, neural, and perception pathways. The regulator mechanism fortifies an individual to cope with milieu stimuli. The **cognator** on the other hand, is a mechanism which includes emotions, perceptions, learning, and judgment.

### **An application of Roy's Adaptation Model on the psychosocial needs and coping strategies of people living with hypertension**

The Model assumes that the individual is a composite of interrelated system (that is, biological, psychological and social systems). People with Hypertension are interrelated biologically, psychologically, and socially and there must be a balance that must exists between these components.

The model comprises of four domains: person, environment, health and nursing. They are seen as the person who needs care and support from the nurse and other medical personnel where they can approach for treatment. As a biopsychosocial being, the person is in a regular interaction with the environment.

The person is regarded as an open and adaptive system, and regularly uses different coping skills in dealing with his psychosocial needs, by adapting certain coping strategies.

The environment is seen as all conditions and circumstances that influences that surrounding and affects the development and healthy lifestyle behaviours of people having Hypertension. Stressors are the various psychosocial needs that people hypertensive people are having. Health and illness are on a continuum. This means that people having Hypertension are either ill or healthy.

Health is seen the process of becoming integrated with the whole person. This means, if a person cannot cope with his health needs, he is seen to be ill but if he can cope then he is seen to be healthy. And so, nurses from time to time are in the best place of promoting the wellbeing of those people suffering from hypertension for them to cope with their psychosocial needs.

The nurse assists those people having Hypertension by promoting their adaptation in each components of the model, thereby enhancing the person's health quality of life and to die with dignity.

From the six-steps nursing process employed by Callista Roy:

1. **Assessment of behaviour:** the nurse assesses the healthy lifestyle behaviours of those people living with hypertension. Many of the strategies they adopt to stay healthy might be detrimental to their health, and so they are being assessed in order to proffer a better way for them.

2. **Assessment of stimuli:** the nurse assesses what further makes the blood pressure to rise in order to encourage or discourage their negative lifestyle habits.
3. **Goal setting:** the nurse sets target point for the sufferers of the disease to see that their needs are met.
4. **Nursing diagnosis:** the nurse works collaboratively with different medical personnel to see that diagnosis and prompt treatment is done to minimize the stress of the patient with the condition for too long.
5. **Intervention:** the nurse intervenes on the patient's condition seeing because the patient has already been diagnosed to be hypertensive. Those living with Hypertension are then encouraged to comply with their medications and engage in healthy lifestyles in order to stay healthy.
6. **Evaluation:** the nurse, after the services he or she has rendered, evaluates the hypertension sufferer to see whether the goals that were initially set for the patient are met, so as to either continue or discontinue in the care given to the patient.

According to Roy, 1983 there are types of stimuli which can affect an individual's ability to relate harmoniously with the environment. These include focal stimuli, contextual stimuli, and residual stimuli. Focal stimuli are those factors that immediately confront the individual in a particular situation. They include individual needs; the level of family adaptation; and changes within the family members, among the members and in the family environment.

Contextual stimuli refer to those other stimuli that affect the situation. Residual stimuli are the beliefs or attitudes of the individual that may interfere with the situation. Contextual and residual stimuli for a family system include nurturance, socialization, and support. Adaptation occurs when the total stimuli fall within the individual's/family's adaptive capacity, or zone of adaptation.

### **2.8 Summary of Literature Review**

This chapter deals with relevant literature reviews on the psychosocial needs and coping strategies employed by people living with hypertension in Yenagoa metropolis of Bayelsa State. It focuses on the concept of hypertension and the socioeconomic impacts of hypertension. It also explores the various coping strategies utilized by people hypertension suffering individuals and the psychosocial needs of people with hypertension, as well as the available resources for meeting the needs of people with Hypertension. It also makes a review of related empirical studies, and the theoretical model adopted was the Roy's Adaptation.

## **III. METHODOLOGY**

### **3.0 Introduction**

This chapter presented a description of the area of the study, the research design, population for the study, sample and sampling techniques, instrument for data collection, validity of the instrument, reliability of the instrument, method of data collection, method of data analysis used for the study, and ethical consideration.

#### **3.1 Research Design**

The research design adopted for the study is cross sectional descriptive design, in order to answer the research questions of the psychosocial needs and the coping strategies employed by people living with Hypertension in Yenagoa metropolis, Bayelsa State. This design has been successfully used by researchers to study hypertension in line with the psychosocial stress of people with hypertension (Mondel, Morgan & Dutcher, 2007).

#### **3.2 Research Setting**

The study was carried out in Federal Medical Center and Diets Koki Memorial Hospital, Opolo in Yenagoa, Bayelsa State, Nigeria. The Medical out patient's department of the respective facilities were used. The selected facilities were used on a purposive basis because they are the largest referral hospitals in Yenagoa Metropolis and receives the highest number of hypertensive individuals in the state.

#### **3.3 Study Population**

The target population for the study comprises of 290 people living with hypertension and currently receiving treatment in the Medical Outpatient Department of the Federal Medical Center Yenagoa and Diets Koki Memorial Hospital, Opolo, Yenagoa Bayelsa State as at the time of the study. 170 participants were from Federal Medical Center and 120 participants were from Diets Koki Memorial Hospital, Opolo in Yenagoa as indicated by the patient register.

#### **3.4 Sample Size**

The sample size was gotten from Taro Yamen formula:

$$n = \frac{N}{1 + N(\delta)^2} \quad \text{where } N = \text{target population and } \delta = 0.05(\text{probability value})$$
$$n = \frac{290}{1 + 290(0.05)^2}$$
$$n = \frac{290}{1 + 290(0.0025)}$$

$$\frac{290}{1+0.725} = \frac{290}{1.725} = 168.12 = 168$$

10% attrition was added to account for marginal error

$$\frac{168 \times 10}{100} = 16.7 = 17$$

Therefore,  $168 + 17 = 185$

However, 175 questionnaires were returned by respondents at the time of completion, making the sample size 175.

### **3.5 Sampling Technique**

A stratified proportionate sampling technique was used to select the participants in the respective facilities, from which participants were recruited. The proportions for each facility are calculated as shown below. The sample size is mathematically calculated as  $X/T \times$  Anticipated sample size, X= individual group population, anticipated sample size =290, and T =total population.

Sample size of FMC participants =  $170/290 \times 185 = 108$ ; Sample size of Diets Koki Memorial Hospital, Opolo participants =  $120/290 \times 185 = 77$ . The participants were randomly selected to ensure that patients attending to the facilities have equal chance to participate in the study.

### **3.6 Inclusion criteria**

The following were eligible for the study; People diagnosed with hypertension at outpatient department in the respective facilities. People living with hypertension and are up to 31years of age. People currently receiving treatment in the respective facilities.

### **3.7 Instrument for Data Collection**

The instrument used for data collection was a structured questionnaire adopted from Mondel, Morgan and Dutcher (2007), on the psychosocial stress and the coping strategies employed by people living with Hypertension. The instrument comprises of 24 structured questions with multiple choice response options. The questionnaire is divided into four sections namely; A, B, C, and D. Section A consist of six (6) items dealing with demographic variables (age, gender, marital status, educational qualification, occupation, and ethnicity). Section B comprise of ten (10) items on the coping strategies employed by the people living with hypertension. Section C will consist of eight (8) items on the psychosocial needs of people with hypertension. Section D which consist of six (6) availability of resources for hypertension management. A four-point rating scale (1-4): Strongly agree (SA)=4, Agree(A)=3, Disagree(D)=2, and Strongly disagree (SD)=1 were utilized.

The participants were instructed to tick (v) as it applies to them. The items in the questionnaire were organized to reflect the objectives of the study as well as research questions.

### **3.8 Validity of the Instrument**

Face validity and content validity were done by the investigator's supervisor and another expert in the field of nursing, where the questionnaire was scrutinized and some items were removed, while others added as appropriate without distorting the intent of the study.

### **3.9 Reliability of the Instrument**

A pilot test was carried out using test-retest method among 17 respondents (10percents of sample size) living with hypertension who were part of the study in the Federal Medical Center annex Otuoke. The reliability of the instrument was tested using Cronbachs Alpha, and a coefficient of 0.9 and above was gotten which reveals that the instrument is highly reliable.

### **3.10 Method of Data Collection**

The questionnaire was administered to 185 participants by the researcher and an assistant that is fluent in English language and indigenous language of the people was employed to translate where the participant was not literate. After receiving treatment from their primary health care providers, the researcher invited participants who accepted to participate in the study into a separate room in order to reduce noise and unnecessary distraction during the process. Both the literate and the illiterate that are having hypertension were involved in the study. After the administration and retrieval of the instruments (about 175 retrieved) the investigator prepared the copies of the instruments retrieved for data analysis and interpretation, by way of sorting and coding.

### **3.11 Method of Data Analysis**

Data analysis was done with SPSS version 20.0. Descriptive statistical tools such frequencies and percentages were used for the analysis of the demographic data. Mean analysis was used to analyze the responses about the psychosocial needs and the coping strategies employed by people living with Hypertension.

### **3.12 Ethical Consideration**

Ethics are the conduct that distinguish between right and wrong in peoples conducts. (Dich, McKee & Porter, 2013). The aim of the research was fully communicated to the respondent for him/ her to make informed

decision either to participate in the study or not. Confidentiality, respect to human dignity, principle of justice and right to privacy were strictly adhered to by the researcher. Ethical approval was sought from the institutional research board ethical committee of Federal Medical Center, Yenagoa and Diète Koki Memorial Hospital, Opolo, Yenagoa, Bayelsa State.

The following ethical issues were considered in order to accomplish this study as stated by Polit and Hunglar (2013) which is based on four major ethical principles:

**Informed consent** is the major ethical issue in caring out a research. (Elliott, Aitken & Chaboyer, 2012). Informed consent is one of the ways by which a patient's right to autonomy is respected.

Burns, Grove and Gray (2011) asserted that it also seeks to prevent assaults on the integrity of the patient and protect personal liberty and veracity. Individuals can participate in research willingly only if they have information on the possible risks and benefits of the research.

**Principle of beneficence (do not harm).** This principle states that the researcher should not do any harm to the subjects. The principle consists of the following components, freedom from harm, and freedom from exploitation, benefit from the research and risk and benefit ratio.

**Principle of self-respect for human dignity:** This principle has two components, the right to self-determination and the right to full disclosure. Principle of justice: This includes the potential subjects right to fair treatment and their right to privacy. It includes right to fair treatment and right to privacy. Respect for anonymity and confidentiality. American nurses' association, (2015) suggests anonymity is protected when the subject's identity cannot be linked with personal responses. If the researcher is not able to promise anonymity, he has to address confidentiality, which is the management of private information by the researcher in order to protect the subject's identity.

Approval to conduct the research was sought from the institutional research board (IRB) ethical committee of the research setting and all ethical issues were adequately adhered to.

See appendix for approval letters.

#### IV. DATA ANALYSIS AND PRESENTATION OF RESULTS

##### 4.0 Introduction

This chapter presents data analysis, interpretation and summary of findings. The generated data are presented in Tables. This was done based on the objectives and research questions set for the study.

##### 4.1 Data analysis and presentation of results

**Table 4.1: Demographic characteristics of study Respondents**

Variables	Frequency (N)	Percentages (%)
<b>Gender</b>		
Male	96	54.9
Female	79	45.1
<b>Age</b>		
31-40	27	15.4
41-50	34	19.4
51-60	46	26.3
61 and above	68	38.8
<b>Marital status</b>		
Single	18	10.3
Married	116	66.3
Separated	31	17.7
Widow	10	05.7
<b>Educational qualification</b>		
No formal education	02	01.1
Primary	21	12.0
Secondary	24	13.7
Tertiary	128	73.2
<b>Occupation</b>		
No regular job	53	30.3
Trading	22	12.6
Farming	21	12.0

<b>Retired</b>	09	05.1
<b>Civil Servant</b>	70	40.0
<b>Ethnicity</b>		
<b>Ijaw</b>	97	55.5
<b>Hausa</b>	31	17.7
<b>Yoruba</b>	23	13.1
<b>Igbo</b>	24	13.7

Out of all 175 respondents who participated in the study, 96(54.9) of respondents are male while 79(45.1%) respondents are female. 27(15.7%) of the respondents were between the age range of 31-40 years, 34(19.4%) were age 41-50 years, 46(26.3%) were between 51-60 and 68(38.8%) were between of 61 and above, with a mean age of 46 years; for marital status respondents who are single represents single 18(10.3%), married 116(66.3%), separated were 31(17.7%) while those that were Widow where 10(5.7%) of the total population. For educational qualification no formal education 2(1.1%), 21(12.0%) have attained primary school certificate, while 128(73.2%) have attained tertiary education. Concerning occupation of the respondents, no regular job was 53(30.3%), Trading 22(12.6%), Farming 21(12.0%), Retired 9(5.1%), while Civil Servants 70(40.0%). For ethnicity, majority were Ijaws, 97(55.5%), Hausa 31(17.7%), Yoruba 23(13.1%), while Igbos were 24(13.7%).

**Table 4.2: Psychosocial Needs of People Living with Hypertension**

<b>ITEMS</b>	<b>SA (4)</b>	<b>A (3)</b>	<b>SD (2)</b>	<b>D (1)</b>	<b>Σfx</b>	<b><math>\bar{x}</math></b>
<b>I need a means of anxiety prevention when my blood pressure is high</b>	74(42.3) (296)	31(17.7) (93)	35(20.0) (70)	35(20.0) (35)	494	2.82
<b>I need occupational modification to make my blood pressure normal</b>	116(66.3) (464)	40(22.9) (120)	14(8.0) (28)	5(2.9) (5)	617	3.53
<b>I need to engage in recreational modification</b>	99(56.6) (396)	44(25.1) (132)	2(1.1) (4)	30(17.1) (30)	562	3.21
<b>I need people to support me emotionally when I am broken down</b>	48(27.4) (192)	46(26.3) (138)	67(38.3) (134)	14(8.0) (14)	478	2.73
<b>I need means of transporting myself to the hospital for medical visit.</b>	99(56.6) (396)	44(25.1) (132)	30(17.1) (60)	2(1.1) (2)	590	3.37
<b>I need information on how to care for my hypertension</b>	99(56.6) (396)	44(25.1) (132)	2(1.1) (4)	30(17.1) (30)	562	3.21
<b>I need financial support from people on how to pay my medical bills</b>	50(28.6) (200)	88(50.3) (264)	34(19.4) (68)	3(1.7) (3)	535	3.06
<b>I need facilities that will enhance my living positive with my hypertension</b>	77(44.0) (308)	65(37.1) (195)	31(17.7) (62)	2(1.2) (2)	567	3.24
<b>I need access to anti-hypertensive drugs/treatment regimen</b>	63(36.0) (252)	48(27.4) (144)	47(26.9) (94)	17(9.7) (17)	492	2.90
<b>I need social support from people whenever I feel stressed, as a result of my hypertension</b>	63(36.0) (252)	48(27.4) (144)	17(9.7) (34)	47(26.9) (47)	477	2.73
<b>Average mean</b>						<b>3.08</b>

**Key:** SA=Strongly Agreed, A=Agreed, D=Disagreed, SD= Strongly Disagreed  
 Mean ( $\bar{x}$ )=  $\Sigma fx/N$ , N=175, cut-off mean= 2.50

Table 4.2 revealed the psychosocial needs of the respondents, which comprises of both the psychological and social needs of the people living with hypertension in Yenagoa metropolis, Bayelsa State. All the item mean scores (2.82, 3.53, 3.21, 2.73, 3.37, 3.21, 3.06, 3.24, 2.90, 2.73) are greater than the cut-off mean score of 2.50. On the whole, the average mean score 3.08 is also greater than the cut-off mean score of 2.50. This implies that people living with hypertension have needs that should be attended to. Most of the respondents (89.2%) agreed that they need occupational modification to make their blood pressure normal ( $x=3.53$ ); (81.7%) need to engage in recreational modification, require information on how to care for their hypertension ( $x=3.21$ ); and need means of transporting themselves to the hospital for medical visit( $x=3.37$ ); (81.1%) need facilities that will enhance living positive with their hypertension ( $x=3.24$ ); and 78.9% of the respondents agreed that they need financial support from people to pay for their medical bills ( $x=3.06$ ). About two third of the respondents (63.4%) need access to anti-hypertensive drugs/treatment regimen ( $x=2.90$ ); and social support from people whenever they feel stressed, as a result of their hypertension ( $x=2.73$ ). (60.0%) agreed that they need a means of anxiety prevention when their blood pressure is high ( $x= 2.82$ ). However, slightly above half (53.7%) of respondents need people to support them emotionally when they are broken down ( $x=2.73$ );

**Table 4.3: Coping Strategies employed by People Living with Hypertension**

ITEMS	SA(4)	A(3)	D(2)	SD(1)	$\Sigma fx$	$\bar{x}$
<b>I engage in regular exercise to make my blood pressure normal</b>	34(19.4) (136)	89(50.9) (267)	37(21.1) (74)	15(8.6) (15)	496	2.81
<b>I engage in maintaining normal weight</b>	34(19.4) (136)	74(42.3) (222)	50(25.6) (100)	17(9.7) (17)	475	2.71
<b>I engage in taking low salt to make my blood pressure normal</b>	43(24.6) (172)	88(50.3) (264)	24(13.7) (48)	20(11.5) (20)	504	2.88
<b>I engage in taking diets low in fats</b>	9(5.1) (36)	13(7.4) (39)	70(40.0) (140)	83(47.4) (83)	298	1.70
<b>I engage in dietary modification to stay healthy</b>	27(15.4) (108)	94(54.3) (282)	25(14.3) (50)	28(16.0) (28)	468	2.67
<b>Smoke cessation is good for my health so as to control my blood pressure</b>	74(42.3) (204)	26(14.9) (78)	56(32.0) (112)	19(10.9) (19)	505	2.89
<b>I engage in reducing alcohol to make my blood pressure normal</b>	51(29.1) (204)	50(28.6) (150)	48(27.4) (96)	26(14.8) (26)	476	2.72
<b>I do check my blood pressure</b>	74(42.3) (296)	60(34.3) (180)	27(15.4) (54)	14(8.0) (14)	544	3.11
Average mean						<b>3.07</b>

**Key: SA= Strongly Agreed, A= Agreed, D= Disagreed, SD= Strongly Disagreed**  
**Mean ( $\bar{x}$ )=  $\Sigma fx/N$ , N=175, cut off mean= 2.50**

As presented in Table 4.3, the result revealed the coping strategies employed by people living with hypertension in Yenagoa metropolis, Bayelsa State. The item mean scores (2.81, 2.71, 2.88, 2.67, 2.89, 2.72, 3.11) are greater than the cut-off mean score of 2.50, which implies that those living with hypertension employs good strategies to care for their hypertension. While 1.70 item mean is less than the cut-off mean, and this shows that few people living with hypertension do not engage in taking low fat diets to keep their blood pressure normal. However, the average mean score 3.07 is also greater than the cut-off mean score of 2.50. This shows that there is a significant level in the strategies employed by people living with hypertension to stay healthy. Majority of respondents (76.6%) of respondents do check their blood pressure regularly ( $x=3.11$ ); 74.9% of respondents engaged in taking low salt diet ( $x=2.88$ ) and (70.3%) in regular exercise to make their blood pressure normal ( $x=2.81$ ); 69.7% of respondents agreed that they engage in dietary modification to stay healthy ( $x=2.67$ ); 61.7% of respondents agreed that they engage in maintaining a normal weight ( $x=2.71$ ); 57.7% of respondents agreed that they engage in reducing alcohol to make their blood pressure normal ( $x=2.72$ ); 57.2% of respondents agreed that smoke cessation is good for their health so as to control their blood pressure ( $x=2.89$ ); However, 87.7% of respondents disagreed that they engage in taking diets low in fats ( $x=1.70$ ).

**Table 4.4: Availability of Resources for Hypertension Management**

ITEMS	Available	Not Available
<b>Health care facilities that have adequate number of experts on hypertension management</b>	Nil	175 (100%)
<b>Facilities for diagnosing hypertension</b>	37 (21.4%)	138 (78.9%)
<b>Anti-hypertensive medications at affordable price</b>	33 (18.9%)	142 (81.1%)
<b>Support system for managing my hypertension</b>	120 (68.5%)	55 (31.4%)
<b>Heart foundations for people living with hypertension</b>	35 (25.7%)	130 (74.3%)
<b>Food items for reducing hypertension or managing my blood pressure</b>	16 (9.2%)	159 (90.8%)

Table 4.4 revealed the participant’s responses on available resources for managing hypertension in Yenagoa metropolis, Bayelsa State. All the respondents stated that health care facilities that have adequate number of experts on hypertension management are not available; 90.8% of respondents affirmed that food items for reducing hypertension for managing their blood pressure are not available; 81.1% of respondents stated that anti-hypertensive medications at affordable price are not available; 78.9% of respondents said that facilities for diagnosing hypertension are not readily available in their health care system; 74.3% of participants affirmed that heart foundations are not readily available for people living with hypertension; However, 68.5% of participants stated that support systems

## V. DISCUSSION OF FINDINGS

### 5.0 Introduction

This chapter deals with the discussion of the major findings, implications of the study, limitations of the study, suggestions for further studies, summary, conclusion and recommendations.

### 5.1 Discussion of findings

Discussions for this study is guided by research questions:

#### Research question 1

#### **What are the psychosocial needs of people living with hypertension in Yenagoa metropolis, Bayelsa State?**

The findings from this study as presented in table 4.2, the results revealed that respondents have psychosocial needs, which comprises of both psychosocial and social needs. 60% (x=2.82) of respondents need means of anxiety prevention.

This, they do because people living with hypertension are also faced with problem of anxiety, because of the burdens the disease comes with. As stated by Irene, Frances & Samuel, 2014. Many patients with hypertension experience many negative emotional states which increases their risk for developing mental health disorder like anxiety and depression.

Spruill, 2010, also stated that psychosocial factors that influence emotional stress can evoke a physiological response mediated in part by activation of the sympathetic nervous system and the hypothalamic-pituitary-adrenal axis. Repeated activation of this system can result in failing to return to resting blood pressure level. Hypertensive patients should be given good attention because anxiety is what affects their inner man, and once their inner man is affected then their whole body will be involved. 89.2% with a mean (x=3.53) of the respondents need occupational modification.

This is because many people with hypertension engages themselves into different strenuous jobs, doing jobs that could pose a great risk to their health, not minding the fact that they are hypertensive. Spruill, 2010 added that working conditions that induce stress are associated with increased risk of hypertension. Aldolfo, David, & Michelle, 2010 also added that occupational stress can include hostile work environment (e.g. threatened, bullied or harassment by anyone while the victim was on working environment). Work insecurity (e.g., worried about being unemployed, time pressure, work hazards and other work conditions (e.g. sedentary tasks, uncontrollable task plays a bigger role in the elevation of oust blood pressure if a good attention is not given.

The researcher noted that many of these patients need to change their occupations. This is because if they continue with the kind of job they are currently on, then heart attack is inevitable. Many undergo their job without even finding time to rest, even if they want to continue with their present occupation there is the need for limitation or reduction in the number of hours they put in or their job and also to maintain a good working environment so as to remain healthy.

Overwhelming majority of the respondents (81.7%) need to engage in recreational activities. This is because many people with hypertension are always full of goal task that they have set for themselves, not even

without putting to mind that they are hypertensive. They believe that they would meet up with their set goals. They do this so as to make their lives going, without being wanting to be idle.

Aldolfo, David, & Michelle (2017), also added that if the targeted goals and aspirations that the individual with high blood pressure sets for themselves are not reached then he/she fills disappointed and that becomes a point of concern. The researcher noted that in order to overcome this challenge, people living with hypertension should be advised to set up goals that can be achieved, with remarkable benefits to their health, so that they will not fill disappointed at the end. 53.7% with a mean ( $x=2.73$ ) of the participants which is slightly above average need people to support them emotionally when they are broken down.

The researcher noted that people with hypertension needs other people to support them emotionally, financially, domestically and otherwise. People need assistance in different areas of life because one cannot live successfully alone. People with hypertension needs people who will encourage them to visit the clinic, even in areas of taking their anti-hypertensive medications.

Hypertension is a disease that affects everybody, but mostly the adults if one does not take good care of his health. Aldolfo, David, & Michelle, 2017 said high levels of anxiety and depression symptoms are common in adult, often comorbid with chronic illness such as hypertension and can have deleterious effects on individual's health and quality of life if the individual does not pay good attention to his health status. Overwhelming majority of the participants (81.7%) with a mean ( $x=3.37$ ) need a means of transporting themselves to the hospital for medical visit. The researchers noted that many people residing in the rural communities' needs means of transporting themselves to the hospital for medical visit. This is because Bayelsa State is surrounded by water and many people transports themselves from the rural communities to Yenagoa for medical visit.

Lack of functional clinics in the villages and the distance in transporting themselves from their villages to the hospital has been a major point of concern to their health. Mondel, Morgan & Dutcher, 2007 also added that transportation to medical visits may be something with which individuals need assistance so the individual could always be in good state of health.

The researcher also noted that lack of accessible roads to the villages also pose a major threat to those living with hypertension, thereby making them not to meet up with the medical personnel in the hospital for onward management of their hypertensive conditions. Overwhelming number of the participants (81.7%) with a mean ( $x=3.21$ ) need information on how to care for their hypertension.

The researcher noted that information is power, so people need more information on how to go about the management of their condition. They need information on when to visit the hospital in order to adhere to their medications. They need information on where i.e, which of the hospital they can visit. They will need information on how to regularly check their blood pressure in order to know whether it is normal or high, and the dangers involved in living with a persistent high and uncontrolled blood pressure.

Mondel, Morgan & Dutcher, 2007 added that informational needs focus on obtaining knowledge needed to manage hypertension; which include information about treatment of the disease, lifestyle changes and ways to manage symptoms when hypertensive. They also added that specific information needs relate to managing side effects of anti-hypertensive medications, decreasing chances of complications, promoting healthy eating pattern and using alternative or natural treatments needs to be given good attention so the individual will always be up to date on information regarding to his disease condition. 78.9% with a mean ( $x=3.06$ ) need financial support to pay for their medical bills.

The researcher noted that many people attending to the hypertensive clinic have financial problem. Most of them even find it difficult to buy their anti-hypertensive drugs, even to pay for their hospital bills, and this a greater burden on these people. Palatini, Bratti, Palomba, Saladini, Zanatta & Maraglino ( 2010) also added that low financial status has been related to blood pressure patterns that are related to hypertension, including reduced nocturnal blood pressure dipping and delayed blood pressure recovery, because people living with hypertension are sometimes faced with financial challenges, some cannot even pay for their medical bills, some cannot even buy their anti-hypertensive drugs when diagnosed to be hypertensive. 81.1% with the mean ( $x=3.24$ ) need facilities that will enhance them to live positive with their hypertension.

For someone living with hypertension to live positively there is need for joint collaboration by the family, functioning hospitals, community, the patient himself and the medical or healthcare providers. This is because the aforementioned have in one way or the other towards contributing to the positive living of the patients. Vanesa, 2016 added that efforts to promote the lifestyle of hypertensive patients, in order to curb its burden and other CVD globally must extend beyond level of the individual and include various contexts involving the family, communities and the entire population.

The hospitals also need to be well equipped with health care personnel as well as drugs in order to meet up with the pressing health demands of those living with the disease. 63.4% with the mean ( $x=2.90$ ) of respondents need access to anti-hypertensive drugs/ treatment regimen. The researcher noted that many of these

people living with this disease need access to anti-hypertensive drugs, and appropriate health care facilities they can get themselves treated. This is because some of our hospitals lacks good anti-hypertensive drugs.

Patients goes to the hospitals without getting their drugs and so find it difficult to get good treatment regimen. Vanessa, 2016 added that providing essential medicines for reducing hypertension risk is necessary as well as tackling those fat high risk. He also added that the majority of cases of hypertension can be cared effectively at the primary care level, and non-physician health workers can also play a role in the detection and care of hypertensive patients.

This, in the present-day society hospitals are scarcely seen functioning appropriately, and this is stands as a risk to those living with hypertension. Vanassa (2016) also added that community health workers can also play a big role in influencing behavior change such as improving diets or undertaking physical exercise. 63.4% with mean ( $x=2.73$ ) need social support from people when they feel stressed due to their hypertension.

Married people living with hypertension needs their partners to support them socially. Even from friends, they don't need to be isolated so as to feel more comfortable, and of high value in the society. Aldolfo, David, Michelle (2017) added that social relationships serve as sources of emotional support (e.g. empathy, informational support and instrumental support).

They also added that these positive aspects of social ties directly enhance health and to reduce the negative effects of stressful experiences on health by enhancing individual's capacity to cope with stress. Jae, Heffernan, Yoon, Park, Carnethon, & Fernhall (2012) also added that social relationships are important sources of emotional supports, and can buffer the negative physical and psychological effects of stress to people living with hypertension.

They also added that social isolation, in terms of the size and composition of the social network (marital status, number of close friends and relatives, religion or other group affiliations) has been prospectively associated with CVD, including hypertension and all-cause mortality. Sun, Zheng, Detrano, Zhang, Xu, & Li, 2010 also added that married individuals tend to experience some better health outcomes than those who are single, because of their togetherness and the encouragements they stand to give to each other towards strict adherence to their antihypertensive medications, and prompt utilization of the available health care facility.

## **Research question 2**

### **What are the coping strategies employed by people living with hypertension in Yenagoa metropolis, Bayelsa State?**

As presented in table 4.3, the result revealed knowledge of respondents as regards coping strategies for hypertension. 70.3% with mean ( $x=2.81$ ) of the respondents engaged in regular exercise to make their blood pressure normal.

The researcher noted that people living with hypertension are becoming aware of the dangers of not engaging in regular exercise. There is need for people living with hypertension to engage in physical activities to keep their body off from diseases like hypertension and other CVDs. National Heart Foundation (2016) added that it is necessary for frequent physical activity and moderate to high levels of cardiorespiratory fitness, protection against hypertension and all-cause mortality in both normotensive and hypertensive individuals.

They also added that frequent aerobic exercise has been shown to lower systolic and diastolic blood pressure by up to 3.2mmHg and 2.7mmHg respectively, without affecting night time blood pressure. 61.7% with a mean ( $x=2.71$ ) of respondents engaged in maintaining a normal weight to make their blood pressure normal.

The researcher noted that extra weight is an extra burden on these living with hypertension because this creates an extra load to the heart. National Heart Foundation, 2016 added that weight loss is associated with reduction of blood pressure and improve glycemic control, improvement in the markers of chronic kidney diseases and reduce cardiovascular disease risk and all-cause of mortality. They also added that in adults with BMI greater than 35kg/m<sup>2</sup>, clinically meaningful reduction in systolic blood pressure. 74.9% with a mean ( $x=2.88$ ) of respondents engaged in taking diets low in salts to make the blood pressure normal. the researcher noted that too much salt intake is not good for the body because salt helps the cells of the body to attract water and retain it thereby increasing the blood pressure.

People living with hypertension are becoming aware that too much of salt intake is not good to the body, and so they believe that it is necessary to reduce the amount of salt they add into their diets so as to make their blood pressure normal. National Heart Foundation, 2016 added that there is relationship between sodium intake and blood pressure.

A 2012 cochrane review estimated the effects of low sodium and high sodium consumption on blood pressure from 167 trials. it shows that a low sodium intake is found to be associated with an average reduction in systolic blood pressure of 5.48mmHg and 10.2mmHg. Overwhelming majority of respondents (87.7%) with a mean ( $x=1.70$ ) engaged in taking diets low in fats to make their blood pressure. This is quite higher than the 12.5% respondents who said that they take diets low in salt. The mean is rejected because it is lower than the cut-off point of 2.50, the researcher also noted that there is the need for more sensitization on this area. This is

because many people have been engaging in taking diets high in fats without knowing that it is dangerous to their health.

There is also the need for more research, in this area, to know why more people are always taking diet high in fat, since this is harmful to their health. National Heart Foundation, 2016 added that consumption of fats directly associated with the development of hypertension, unhealthy dietary fat is associated with increased risk of CVD. 69.7% with a mean ( $x=2.67$ ) of respondent engaged in dietary modification to stay healthy. This shows that people living with hypertension are now seeing the need for them to engage in taking high rich diets, diets that will be of good benefit to their health so as not to further complicate their medical conditions. The National Heart Foundation, 2016, noted that consumption of food high in saturated fat added salt, added sugars and for excessive alcohol consumption, are associated with higher risk of obesity and chronic disease, like hypertension and other CVDs. They also added that there is the need for patients to consume diets like vegetables, fruits and whole grains, including low fat dairy. Diets may be combined with exercise and weight loss to maximize blood pressure reduction. The researcher noted that it is necessary that people living with hypertension be encouraged to engage in DASH.

This will help to overcome many health changes on the hypertensive patients as well as those that are not hypertensive. 57.2% with a mean ( $x=2.89$ ) of respondent agreed that smoke cessation is good for their blood pressure to be normal. the researcher noted that people living with hypertension have a greater knowledge that engaging in the habit of smoking is detrimental to their health.

The National Heart Foundation (2016) added that on average, a smoker's life expectancy is up to 10 years less than smokers, and that 60% of long-term smokers die prematurely from a smoking related disease. They also added that the risk of a coronary event declines rapidly after quitting smoking and within 2-6 years the heart of the smoker who has quit smoking can be similar to that of a non-smoker. About 29.1% of respondent said they engage in reducing alcohol consumption to make the blood pressure normal.

The researcher also observed that about 57.7% which is slightly above average with a mean ( $x=2.72$ ) of respondent engaged in reducing alcohol intake to make their blood normal. this shows that many people with hypertension within Yenagoa metropolis are still engaging themselves in consumption of alcohol, forgetting the fact that excessive consumption of alcohol is detrimental to their health, and so there is the need for people living with hypertension to be enlightened on dangers of smoking.

The National Heart Foundation, 2016, added that consumption of 2 times standard drinks a day for healthy men and for women can cause a sudden rise in blood pressure. 76.6% with a mean ( $x=3.11$ ) of respondent do check their blood pressure to know if their blood pressure is high or normal. the researcher observed that a greater percentage of people with hypertension are regularly checking their blood pressure.

It is necessary for all patients living with this disease to always engage in regular check/ monitoring of their blood pressure both at home and in the clinics when to take their anti-hypertensive modification. Markus, 2018 noted that it is very necessary to regularly monitor one's blood pressure because hypertension has no symptoms and so only blood pressure readings will reveal if one's blood pressure is on the increasing side. The researcher also observed that an insignificant percentage of those living with hypertension are still ignorant of the fact that regular monitoring of their blood pressure is helpful to their health, and so this people needs to be encouraged to regularly monitor their blood pressure.

### **Research question 3**

#### **What are the available psychosocial resources for meeting the psychosocial needs of people with hypertension in Yenagoa metropolis, Bayelsa State?**

As presented in table 4.4, the result revealed knowledge of respondents as regards the available psychosocial resources for the meeting the psychological needs of people with hypertension.

All the respondents (100%) stated that there are limited available health care facilities that have adequate number of experts on hypertension management. Health care facilities are necessary for the day to day treatment of those patients, including those living with hypertension. Among these are health care personnel which should be adequate in number and should always be on ground in the hospitals/clinics with the aim of rendering optimum care to the patients.

When there are enough available hospitals, including qualified health care personnel then those living with hypertension will have improved level of wellness. Hypertension is a silent killer and has no known symptoms and so there is the need for equipped health care facilities, as well as enough qualified health care personnel which would serve as the frontiers of the patients improved levels of care.

As stated by Naheed, Haldane, Jafar, Chakma & Legido-Quigley (2018), that many patients see hypertension as an important disease that has no symptoms and that qualified doctors and nurses in both private and government hospitals are the major key players in the diagnosis of hypertension in the majority of those people living with hypertension. The researcher noted that the rivers has been what is seen. This is because, at most all the respondents said that there are no available health care facilities that have adequate number of

experts in managing their hypertension. Bayelsa is a state that is mostly dependent on the political wheel by the people. Building/citing health care facilities as well as employing personnel in the state solely depends on the political class, and this has been one of the major hindrances to the health care system in the state.

Those living with hypertension find it very difficult to locate any good hospital with enough available health care personnel for the care of their hypertension. The government need to take proactive measures to make sure that our hospitals are all better equipped, with the aim of including or paying much attention into the health budgets and more health care personnel should be employed and retrained to care for those living with hypertension.

Naheed, Haldane, Jafar, Chakma, & Legido-Quigley (2018), also added that the challenges in the health care system includes lack of support system to enable community screening by government health personnel, longer waiting times, and inadequate supplies of equipment for the care of hypertension. 78.9% of the respondents stated that there are no available facilities for diagnosing hypertension.

The researcher noted that in Bayelsa state, especially in Yenagoa metropolis there are so many private hospitals but with no adequate qualified medical practitioners, as well as good hospitals for the care of hypertension so as to put up their very best towards ensuring the effective availability of health care facilities and qualified medical experts in the fight against hypertension so that the psychological problems attached to the disease is been conquer. Many patients go to some of our hospitals to check their blood pressure so as to know if their blood pressure is high or not, but only to meet an empty hospital with no availability of medical experts to attend to them. Most at times some staffs are seen around the hospitals but with no functioning equipment to deliver their services to those people with hypertension. So, the government should also make sure that there are enough facilities for diagnosing hypertension in the state so as to over this silent killer. 81.1% of the respondents stated that there are limited available anti-hypertensive medications at affordable prices. Anti-hypertensive medications are some of the major approach that people living with hypertension relies on for the care of their condition. The hospitals also depend solely on some of these antihypertensive medications. But it goes a long way in the psychological care of these patients. Drugs alone cannot deliver the total care to the patients. According to Naheed, Haldane, Jafar, Chakma & Legido-Quigley (2018), hypertension is an increasing threat to the health of many people, within and outside Africa and is a leading cause of premature death, and an important modifiable risk factor for cardiovascular and cerebrovascular disease and that despite evidence on the efficacy of anti-hypertensive medications for blood pressure control and mortality prevention, a large number of individuals have not been diagnosed and treated, especially, in resource constrained setting. This is because so many doctors and nurses are always in haste or too fast to use the drug approach in the care of hypertension without paying good care to the fact that the those with hypertension needs to be properly counselled on the proper drug, its usefulness, its side effect, as well as its cost, and whether the patient can afford the anti-hypertensive medication.

A drug can be available in the hospital but its price can be very high in such a way that the patient cannot be able to buy. So, the government need to come in and play its role in terms of subsidizing the price of the drugs so that the patients can afford, so that the psychological problems attached to this disease can be overcome.

Naheed, Haldane, Jafar, Chakma & Legido-Quigley (2018) also added that a larger number of individuals remain undiagnosed, untreated, and uncontrolled especially in low and middle income countries. Because of the cost of many medications many patients will suffer greatly with the disease burden because they cannot be able to afford to buy their antihypertensive medications.

Ekwunife, Okafor, Ezenduka & Udeogaranya, (2013) added that many drugs are now available for control of hypertension, but some are not affordable for majority of people in Nigeria, and that recent hypertension guidelines stress usefulness of four (4) classes of antihypertensive drugs. i.e thiazide diuretic, beta-blockers, angiotension converting enzymes and calcium channel blockers, which have been shown to be very effective compared to the other antihypertensive drugs, and that these drugs predominate other groups of antihypertensive agents in Nigeria. 90.8% of the respondents stated that there are available food items for reducing or managing their hypertension.

Hypertension is a disease that can be managed or controlled with not just medications but with the inclusion of locally food items like carrot, tomato, garlic and banana. According to Abimbola and Ambrose (2017) that lifestyle modifications, including the regular consumption of local spices and food stuffs may reduce the risk of developing the condition and help in managing it in persons already affected.

Abimbola and Ambrose (2017) also added that garlic when extracted has the ability to reduce the blood pressure of those hypertensive patients just like medications does. He also added that garlic has the ability of lowering uncontrolled blood pressure by 10mmHg systolic and 8mmHg diastolic in just the same way antihypertensive medication does.

The researcher noted that garlic normally is what most people look down on in terms of its medicinal strength on the treatment of hypertension has been exposed and so there is the need for people to utilize it in the

management of their hypertension. Abimbola and Ambrose (2017) also added that garlic derived polysulphides stimulate the production of the vascular gasotransmitter hydrogen sulphide and enhance the regulation of endothelial nitric oxide, which induces smooth muscle cell relaxation, vasodilation and reduction in blood pressure.

Several dietary and genetic factors influence the efficiency of the hydrogen sulphide and nitric oxide signaling pathways and may contribute to the development of hypertension. Abimbola and Ambrose (2017) also noted that banana intake also serves to reduce blood pressure significantly among hypertensive individuals and that it also inhibits atherosclerosis and gall stones in vivo banana contains large amount of potassium (about 300mg/100g fresh weight) as Potassium is an important regulator of blood pressure. Abimbola and Ambrose, (2017), also noted that carrot and tomato have traditionally been used for the treatment of hypertension in their extraction form.

## **5.2 Implications of the study**

- People living with hypertension are faced with problem of anxiety, because of the burdens the disease comes with, which increase their risk for development of mental health disorders. So hypertensive patients should to be given good attention because their inner man is affected, and once their inner man is affected their whole body will also be involved. A bad working environment affects, and also pose a greater risk on the health of people living with hypertension. So, there is the need for occupational modification. i.e. the patients should be advised to also give time to making sure that the kind of work they do does not jeopardize with their health, and the need for them to change their stressful working conditions.
- There is also the need for family and friends to those living with hypertension to support them emotionally and financially. This is because some of the patients don't even have enough money to buy their drugs, and to pay for their medical bills, so this calls for support from their loved ones.
- There is also the need for access roads to be created to the rural communities so that there would be an easy means for people to transport themselves to the urban communities for medical visits. There is also the need for more health centers and qualified personnel to be put in place in the rural communities so that those who cannot get access to the cities for medical visits can utilize.
- Information should be provided to those living with hypertension on where, why, when, what to be done should they notice that their blood pressure is high and the dangers involved in an uncontrolled blood pressure. Campaigns and awareness should be taken to the doorsteps of everyone through the media (radio, television, Facebook, WhatsApp, telegram. etc.) and books so that proactive measures can be taken so as to curb the dangers that follows hypertension. There is a need for more jobs to be created by the government that will benefit those living with hypertension and are without jobs for them to have some finance to take care of their condition.
- More facilities should be created both in the urban and in the rural communities so as to attend to those living with hypertension so that they would be able to live positive with their health. There is the need for nurses to advise people on regular exercise by both those without hypertension and those living with hypertension so as to maintain cardiorespiratory fitness, and to lower the blood pressure to normal.
- There is the need for nurses to encourage those living with hypertension to maintain a normal weight so as to avert extra burden on the heart.
- There is the need for nurses to discourage those living with hypertension from consuming excess salt diets. Because salt helps the cells of the body to attract and retain water thereby increase the blood pressure, so those with the disease should be discouraged from excessive consumption of salt through foods they eat. Nurses also need to encourage hypertensive individuals to modify their diets. Hypertensive individuals should be advised to adapt consume diets like whole grains, fruits, vegetables, low fat dairy products so as to overcome the disease.
- There is also need for those living with hypertension to be discouraged from smoking, because it can cut short their life expectancy.
- Individuals need to periodically check their blood pressure in order to know whether it is normal or not normal, so as for them to further know when to see their attending physician to take their anti-hypertensive medications.
- More health care facilities with adequate medical experts should be provided by both the government and non-governmental agencies. There is also the need for the government hospitals to be equipped with more antihypertensive medications at an affordable price for the effective treatment of hypertensive patients.
- Nurses and the patient's relatives serve as the closest to those living with hypertension, and so there is the need for nurses to advocate on the importance of social network systems to be strengthened.
- There is also the need for the patients to be encouraged to eat balanced diets in-order to always keep them healthy.

### 5.3 Summary/Conclusion

Hypertension is a disease that runs in family and has the ability to cause more complications, and this could further predispose the patients to more psychosocial burdens if attention is not given to them. The government has the major role to play by making more functional health facilities available, as well as employing more medical experts that will from time to time be on ground in these facilities towards making sure that hypertensive patients are not left unattended to, in order to overcome these psychosocial burdens that people living with hypertension are always exposed to.

### 5.4 Recommendations

- There is the need for awareness campaigns for patients to enable them know the various strategies they are to adopt to overcome their hypertensive challenges whenever the need arises. Since the patients living with hypertension are having psychosocial needs, information relating to hypertension should be provided for all those living with hypertension so that they would know or have the knowledge on the disease process.
- Those living with hypertension and are having transportation needs on how to transport themselves to the hospital from the rural communities, the health centers in the interior communities should be given more attention with regards to care of those living with hypertension by the government. Also, more health centers should be cited in the rural communities for the effective care of those living with hypertension.
- Campaigns should be taken to both the door steps of the rural and urban dwellers by both the government and NGOs, so that people will be enlightened on how to proffer supports for their loved ones living with hypertension. People living with hypertension should be advised to eat foods rich in balanced diets and engage in healthy lifestyles like engaging in regular exercises to stay healthy. More health care facilities with adequate medical experts should be provided by both the government and non-governmental agencies.
- There is also the need for the government hospitals to be well equipped with more antihypertensive medications at an affordable price for the effective treatment of hypertensive patients. People living with hypertension should be advised to adhere to regular physician follow-up, as well as take their drugs regularly in order to maintain a normal blood pressure.

### 5.5 Limitations of the study

The limitations of the study are as follows:

**money:** the researcher noted that in course of carrying out the study finance was needed to fund the work but financial challenges were encountered.

**Getting approval to distribute the questionnaire from the institutions of study:** this was another difficult task that was encountered by the researcher, because those to issue out the approval letters were not always on ground in their respective offices, considering their busy schedules.

**Accessibility to the materials needed for the study/poor browsing network:** this was task taking because the browsing network was not even friendly, and accessing materials was daisy.

### 5.6 Suggestions for further study

The researcher there for suggests that more research be carried out on the following areas:

- The usefulness and effectiveness of local spices and foods in the management of hypertension.
- Why more males are living with hyper tension than females

## REFERENCES

- [1]. Abimbola, O. & Ambrose, O. (2017). Antihypertensive medicines prescriptions before and after the Nigeria hypertension society guidelines and prescriber's awareness of the guideline 58(3): 107-113
- [2]. Adolfo, C., David, W. & Michelle, A. (2017). Psychosocial factors and hypertension: A review of literature. *Cardiodin*. 35 (2): 223-230
- [3]. Afzal, S., Nahid, D. N. & Maryam, E. (2017). Living with hypertension: A Qualitative Research. *International Journal Community Based Nurse Midwifery* 5(3):219-230
- [4]. Agyei, B;Nicolaou , Boateng, H; Dijkshoom, B; Agyemang, C.(2014). Relationship between psychosocial stress and hypertension among Ghanaians in Amsterdarm, the Netherlands:the ghaia study. *BMC Public Health* 14(1):692
- [5]. Aina, F., Ajayi E., Kumolalo F. & Inubile, A. (2016). Coping Strategies and Blood Pressure Control among Hypertensive Patients in a Nigerian Tertiary Health Institution. Pp12-17
- [6]. American Nurses Association (2015). Code of ethics with interpretative statements. SilverSpring, MD:Author.Retrievedfrom<http://www.nursingworld.org/MainMenuCategories/EthicsStandards/CodeofEthicsforNurses/Code-of-Ethics-For-Nurses.html> *An International Multi-Disciplinary Journal*. 4 (2): 125-138
- [7]. Andrews, H.& Roy, C. (1991). The Adaptation Model. The Definitive Statement, Appleton & Lange. Norwalk, CT
- [8]. Antoinette, S., George K., Kelvin F. & Gbenga O. (2017). Addressing the social needs of hypertensive patients: the role of patient provider communication as a predicator of medication adherence.

- [9]. Anyan, F., Knizek B.L.& Relig, H. (2018). The coping mechanisms and strategies of hypertension patients in Ghana: The Role of Religious Faith, Beliefs and Practices. *57(4):1402-1412*.
- [10]. August, K.J. & Sorkin, DH., (2010). Maritalstatus and gender differences in managing a chronic illness: The Function of Social Control. *Social Science & Medicine* 71:1831—1838.
- [11]. Brook, R. D., Appel, L. J., Rubenfire, M., Ogedegbe, G., Bisognano, J. D. & Elliott,WJ. (2013). Beyond medications and diet: alternative approaches to lowering blood pressure: *a scientific statement from the American Heart Association* 61:1360—83.
- [12]. Carnethon, M. R., Evans, N. S., Church, T. S., Lewis, C. E., Schreiner, P. J., Jacobs, D. R. (2010). Joint associations of physical activity and aerobic fitness on the development of incident hypertension: *coronary artery risk development in young adults* 56:49—55.
- [13]. Centre for Disease Control (2015). High Blood Pressure Fact Sheet". (2016). More local foods enlisted to treat hypertension
- [14]. Crimmins, E.M., & Beltran-Sanchez, H. (2010). Mortality and Morbidity Trends: Is There a Compression of Morbidity? *Journal of Gerontology: Social Sciences* 66B: 75—86.
- [15]. Daniel OJ; Adejumo OA; Adejumo EN; Owolabi RS; & Braimoh Rw. (2013). Prevalence of hypertension among Urban slum dwellers in Lagos, Nigeria. *J Urban Health* 90: 1016-25
- [16]. Dich, L., McKee, H. A., & Porter, J. E. (2013). Ethical Issues in Online Course Design: Negotiating Identity, Privacy, and Ownership.
- [17]. Ebadi, A; Bakhshian R.K; Malmir M; Shamsi A and Ghanbari R. (2011). Comparison of life quality in military and non–military man with hypertension. *Iranian Journal of military medicine fall* 13(3), 189-194.
- [18]. Ekwunife, Okafor,Ezunduka, & Udeogaranya (2013).Cost utility analysis of antihypertensive medications in Nigeria:a decision analysis. *Cost Eff Resour Alloc* 11(1), pp.2
- [19]. Fariborz, J., Tayebbeh, S., Ali, MR., Shahin, FH., (2015). Lifestyle and coping styles among hypertension patients and normal individuals. *International Journal of applied psychology* 5(6):178-182
- [20]. Farizah, M. H., & Majid, H. A. (2014). A qualitative study on Hypertensive care behavior in primary health care settings in Malaysia. *Patient Preference and Adherence* 8, 1597—1609.
- [21]. Guo, X., Zou, L., Zhang, X., Li, J., Zheng, L. & Sun, Z. (2011). Prehypertension: a meta-analysis of the epidemiology, risk factors, and predictors of progression. *Tex Heart Inst J* 38:643—52.
- [22]. Hamer, M., Batty, G. D., Stamatakis, E. & Kivimaki, M. (2010). Hypertension Awareness and Psychological Distress. *Hypertension*, 56(3), 547—550.
- [23]. Heymann, A., Liora, V., Zucker I., Chodick, G. & Shalev, V. (2012). Perceptions of hypertension treatment among patients with and without diabetes. *160(4):621-625*
- [24]. Ibrahim MM; & Damasceno A. (2012) Hypertension in developing countries. *Lancet* 11;380 (9841):611-9
- [25]. Ibrahim, M.M., Damasceno, A. (2013). Hypertension in developing countries. *Lancet* 14(1)23 — 38
- [26]. Ikeoluwapo, O. S, Onoja M.A. & Ndudi, E.O. (2016). Prevalence of hypertension and associated factors among residents of Ibadan north Local government area of Nigeria (13) 67-75
- [27]. Irene, K; Frances T. Owusu-Daaku, Samuel, A.& Danquah (2014). Mental health in hypertension: assessing systems of anxiety, depression and stress on anti-hypertensive medication adherence: *International journal of mental health systems*.8:25
- [28]. Jae, S.Y., Heffernan, K.S., Yoon, E.S., Park, S.H, Carnethon, M.R., Fernhall, B., et al. (2012).
- [29]. *Journal of health and social Behavior* 52:145—161.
- [30]. James, T. A., Richard M., Aminu M. & Nic, k F. (2015). Current prevalence pattern of hypertension in Nigeria. *A systematic review*;10 (10)
- [31]. Kim, S.J., Lee, J., Jee, S.H., Nam, C.M., Chun, K. & Park, I.S, (2010). Cardiovascular risk factors for incident of hypertension in the prehypertensive population. *Epidemiol Health*;
- [32]. Lackland, DT. & Weber, MA. ((2015) Global burden of cardiovascular disease and stroke: hypertension at the core''. *The Canadian journal of cardiology* 31(5): 569-71
- [33]. Lim, S; Vos T; Flaxman, AD; Danaei, G; Shibuya, k; Adair-Rohari (2010). A comprehensive risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990-2010; A systematic analysis of the global burden of disease study. *Lancet* 380
- [34]. Mark Hamer, David Batty, Emmanuel Stamatakis, Mika Kivimaki, (2010). *Hypertension* 56(3): 547-550
- [35]. Markus, G. (2018). Everything you need to know about hypertension. *Medical News Today*
- [36]. Mayo Foundation for Medical Education and Research, (2018). Stress and High Blood Pressure: what's the connection?

- [37]. McEwen, B. & Brain, O. (2012). How the social environment gets under the skin? Proceedings of the national academy of sciences 109 (Supplement 2):17180- 17185.
- [38]. Melbourne (2015). The seventh report of the joint national committee on prevention, detection, Evaluation, and Treatment of High Blood Pressure. U.S. Department of Health and Human Services.
- [39]. Mondel, AB; Morgan, C; & Dutcher, J. (2007). Psychological needs assessment among an Understand ethnically diverse cancer patient's population. 109: 446-454.
- [40]. Mushtaq, M; & Najma N. (2015). Hypertension; coping strategies used by people. *Professional Med J* 22(7):876-880
- [41]. Naheed, A; Haldane V; Jafar T., Chakma N. & Legido-Quigley H. (2018). Patient pathways and perceptions of hypertension treatment, management, and control in rural Bangladesh: a qualitative study, On behalf of the COBRA-BPS Study Group; 12: 1437–1449
- [42]. Naish, J., & Denise S. (2014). Medical Sciences: Elsevier Health Science: Cost-utility analysis of antihypertensive medications in Nigeria: *a decision analysis*.11: 2
- [43]. National Heart Foundation, 2016. Guideline for the diagnosis and management of hypertension in adults.
- [44]. Oluwatuyi, O. (2010). Health Seeking Behaviour among the Rural Dwellers in Ekiti State, Nigeria. *An international multi-disciplinary journal* 4(2) :125-138
- [45]. Palatini, P., Bratti, P., Palomba, D., Saladini, F., Zanatta, N. & Maraglino, G. (2010). Regular physical activity attenuates the blood pressure response to public speaking and delays the development of hypertension 28:1186—93.
- [46]. Perry, BL. & Pescosolido, BA. (2010). Functional Specificity in Discussion Networks: The Influence of General and Problem-Specific Networks on Health Outcomes. *Social Networks* 32:345—357.
- [47]. Polit, D.F. & Hungler, B.P. (2013). Essentials of Nursing Research: Methods, Appraisal, and Utilization (8th Edition ed.). Philadelphia: Wolters Kluwer/Lippincott
- [48]. Pouliou, T., Kim, Law, C., Li, L. & Power C. (2012). physical activity and sedentary behavior at different life stages and adult blood pressure in the 1958 *British Cohort hypertens* 30:275-83
- [49]. Poulter, N; Prabhakaran D. & Caulfield M. (2015). Hypertension. *Lancet* 386 (9995);801-12
- [50]. Reider, A., & Thomas, D., (2014). Higher risk of high blood pressure for socially disadvantaged. *Medical University Vienna*.
- [51]. Rosland, A. & Piette, JD. (2010). Emerging Models for Mobilizing Family Support for Chronic Disease Management: *A Structured Review on Chronic Illness* 6:7—21
- [52]. Siddiqui, T.R., Ghazal, S., Bibi, S., Ahmed, W., Sajjad & Shaimuna, F. (2016). "Use of the Health Belief Model for the assessment of public knowledge and household preventive practices in Karachi, Pakistan, a Dengue-endemic City". *plos Neglected Tropical Diseases* 10 (11)
- [53]. Spruill, TM. (2010). Chronic psychosocial stress and hypertension. *Curr hypertens Rep.* 12 (1): 10-16
- [54]. Sun, Z., Zheng, L., Detrano, R., Zhang, X., Xu, C., Li, J., (2010). Incidence and predictors of hypertension among rural Chinese adults: results from Liaoning province. *Ann Fam Med* 8:19—24.
- [55]. Tanya, M. P. (2013). Chronic psychosocial stress and hypertension: Curr Hypertension 12(1):10-16: Temporal changes in cardiorespiratory fitness and the incidence of hypertension in initially normotensive subjects. *Am J Hum Bio* 124:763—7.
- [56]. Thawornchaisit, P., deLooze, F., Reid, C.M., Seubsman, S.A., Sleigh, A.C. (2013). Health risk factors and the incidence of hypertension: 4-year prospective findings from a national cohort of 60 569 *Glob J Health Sci.* 5(4):126-141
- [57]. Thoits, (2011). Mechanisms Linking Social Ties and Support to Physical and Mental Health. *J health soc bev* 52((2):145-61
- [58]. Tryon, M., Carter, C., DeCant, R., Laugero, K. (2013). Chronic stress exposure may affect the brain's response to high calorie food cues and predispose to obesogenic eating habits. *Physiology & Behavior* 120:232-242
- [59]. Vanessa P. (2016). Hypertension: putting the pressure on the silent killer pp1-5
- [60]. WHO (2012). Stepwise approach to chronic disease risk factor surveillance. Available from: [http://www.who.int/chp/steps/risk\\_factor/en/index.html](http://www.who.int/chp/steps/risk_factor/en/index.html). accessed 21 June, 2019
- [61]. WHO Global Report (2015). Preventing chronic disease: a vital investment. Geneva: world Health Organization. Walking versus running for hypertension, cholesterol, and diabetes mellitus risk reduction. *ArteriosclerThrombVascBio* 133:1085—91.
- [62]. Williams, P.T. & Thompson, P.D. (2013). Walking versus running for hypertension, cholesterol, and diabetes mellitus risk reduction. *Arterioscler ThrombVascBio* 133:1085—91.
- [63]. Wu, S; Huang Z; & Yang X. (2013). Cardiovascular events in a pre-hypertensive Chinese population. Four-year follow-up study. *International Journal of Cardiology.* Vol 167 (5) 2196-2199

[64]. Yendelela, Chinwe, Gbenga & Antoinette, (2010). *Psychosocial Risk Factors for Hypertension: An update literature* 16 (10): 483

**APPENDIX I**

Department of Medical Surgical Nursing,  
Faculty of Nursing Sciences,  
College of Health Sciences,  
Niger Delta University,  
Wilberforce Island,  
Bayelsa State.

**Dear Respondents**

I am a student currently undertaking masters in medical surgical nursing in Niger Delta University. As part of this degree, I am currently undertaking a research study on *Psychosocial needs and Coping Strategies Employed by People Living with Hypertension in Yenagoa Metropolis of Bayelsa State*.  
The questionnaire is strictly for research purpose and all informations will be held in confidence.

**Instructions**

This questionnaire pack contains four parts: it consists of Section A, Section B, Section C and Section D. Please complete all parts, answering each question in sequence and carefully following any instructions given.

Thanks for your cooperation.

**Possible Ominigbo**

Researcher

**APPENDIX II**

**PSYCHOSOCIAL NEEDS AND COPING STRATEGIES EMPLOYED BY PEOPLE LIVING WITH HYPERTENSION IN YENAGOA METROPOLIS OF BAYELSA STATE**

**DEMOGRAPHIC DATA**

Please tick (✓) as appropriate

1. Gender (a) male [ ] (b) female [ ]
2. Age (a) 31-40 [ ] (b) 41-50 (c) 51-60 [ ] (d) 61 and above [ ]
3. Marital status (a) Single [ ] (b) Married [ ] (c) separated [ ] (d) Widow [ ]
4. Educational qualification (a) No formal education [ ] (b) Primary [ ] Secondary [ ] (c) Tertiary [ ]
5. Occupation (a) No regular job [ ] (b) Trading [ ] (c) Farming [ ] (d) Retired [ ] (e) Civil servant [ ]
6. Ethnicity (a) Ijaw [ ] (b) Hausa [ ] (c) Yoruba [ ] (d) Igbo [ ]

**NOTE:** Please tick ✓ the option that is most suitable to you.

SA = Strongly Agreed

A = Agreed

D = Disagreed

SD = Strongly Disagreed

**SECTION B: PSYCHOSOCIAL NEEDS OF PEOPLE LIVING WITH HYPERTENSION**

S/N	ITEMS	SA	A	SD	D
1.	I need a means of anxiety prevention when my blood pressure is high				
2.	I need occupational modification to make my blood pressure normal				
3.	I need to engage in recreational modification				
4.	I need people to support me emotionally when I am broken down				
5.	I need means of transporting myself to the hospital for medical visit.				
6.	I need information on how to care for my hypertension				
7.	I need financial support from people on how to pay my medical bills				
8.	I need facilities that will enhance my living positive with my hypertension				
9.	I need access to anti-hypertensive drugs/treatment regimen.				
10.	I need social support from people whenever I feel stressed, as a result of my hypertension				

**TABLE C: COPING STRATEGIES EMPLOYED BY PEOPLE LIVING WITH HYPERTENSION**

S/N	ITEMS	SA	A	SD	D
1.	I engage in regular exercise to make my blood pressure normal				
2.	I engage in maintaining normal weight				
3.	I engage in taking low salt to make my blood pressure normal				
4.	I engage in taking diets low in fats				
5.	I engage in dietary modification to stay healthy				
6.	Smoke cessation is good for my health so as to control my blood pressure				
7.	I engage in reducing alcohol to make my blood pressure normal				
8.	I do check my blood pressure				

**TABLE D: AVAILABILITY OF RESOURCES FOR HYPERTENSION MANAGEMENT**

S/N	ITEMS	Available	Not Available
1.	Health care facilities that have adequate number of experts on hypertension management		
2.	Facilities for diagnosing hypertension		
3.	Anti-hypertensive medications at affordable price		
4.	Support system for managing my hypertension		
5.	Heart foundations for people living with hypertension		
6.	Food items for reducing hypertension or managing my blood pressure		