

# **FACTORS INFLUENCING ADHERENCE TO ANTIHYPERTENSIVE USE: A FAITH-BASED PERSPECTIVE**

**By**

**DR SOBOWALE TIWALADE O. B.SC, M.B.Ch.B, MPH(Babcock)**

**Department of internal medicine, Olabisi Onabanjo University Teaching Hospital, Ogun State, Nigeria**

**Email: tiwaladesobowale@yahoo.com**

**And**

**Ikonne Light Chizara.(PhD Candidate)**

**Department of Political science and Public Administration,**

**Babcock University, Ilishan –Remo, Ogun State.**

**Email: thrillaman2003@yahoo.com**

## **Abstract**

*Hypertension is a public health concern. The use antihypertensive drug is key in the management of hypertension. Poor blood control and adverse health outcomes have been attributed to poor adherence to antihypertensive use.*

*The objective of this study is to explore the factors influencing adherence to antihypertensive use: faith-based perspective.*

*The study is qualitative in nature and Interview was conducted among twenty (20) respondents in a faith based institution in Ogun State. All interviews were transcribed verbatim and were analyzed for thematic content. This approach allowed flexibility in gaining in-depth knowledge of the problem. Interview focused on knowledge of hypertensive and antihypertensive drug use, attitude towards anti- hypertension drug use, Belief of the patients on hypertension, self-efficacy, physician communication style, social support, enabling factor like health insurance, and affordability of drugs.*

*Many respondents had little knowledge about hypertension, its management, beliefs about hypertension and its treatment which is a reflection of the cultural belief. Poor physician*

*communication style and social support were also important factors influencing adherence to antihypertensive use.*

*Faith-based institutions are important instrument of economic, political and social change. Thus, their roles in rendering a patient-sensitive medical care as well as other enabling factors to the community can not be overemphasized. There is an urgent need for the churches in Nigeria to bridge the gap in patient's knowledge and treatment of hypertension and advocate for better health insurance coverage, faith-based health institutions should be established to allow for patient tailored health care at subsidized rate.*

## **BACKGROUND TO THE STUDY**

Hypertension is a public health problem. The global prevalence of hypertension according to the World Health Organization in 2008 is 40%. Africa has the largest prevalence of hypertension - 46% . (WHO, 2008). In Nigeria, the prevalence of hypertension has doubled in the past two decades (Chukwu , 2011).

Hypertension can be defined as systolic blood pressure greater than 140mmHg and diastolic blood pressure greater than 90mmHg. Hypertension is a silent killer in that, it is often asymptomatic and progressive. It causes damages to vital organs in the body (brain, heart, kidneys, limbs, eyes) if not well controlled (Nicki, Brian and Stuart, 2014)

Hypertension cannot be cured as some erroneously believe, but it can be controlled with the use of antihypertensive medications. Lifestyle modifications are used as adjuncts and they play significant role on blood pressure control.

World wide, less than 25% of hypertensive patients have their blood pressure under control (Wariva, 2014). The global burden, complications and mortality attributed to poorly controlled hypertension is on the upward trend globally

## **STATEMENT OF THE PROBLEM**

It is disappointing that inspite of the many effective antihypertensive drugs brought about by the technological advances in pharmaceutical industries, the efforts of health personnels in educating the masses on hypertension , via the mass media , the proportion of patients with good blood pressure control is small (Elliot, 2004).

Poor blood pressure control has been associated with poor adherence to antihypertensive medications and lifestyle modification. Poor adherence is a common problem with chronic diseases. In Nigeria, patients with good blood pressure control was only 32.7% and 35.85% in South- west and middle belt respectively (Familoni, Ogun, & Aina, 2004 ; Adebola & Ajose, 2012; Katibi, Olarinoye & Kuranga, 2010)

Non adherence to antihypertensive medication was put as 22% - 45%, 30.7% - 39 % and 42.9% in northern , southern and eastern part of Nigeria respectively. Kumar & Halesh, (2010) defined adherence as the extent to which a person's behavior taking medication, following a diet, and/or, executing lifestyle changes corresponds with agreed recommendations from a health care provider. Morisky Green defined adherence as all of, not forgetting to take drugs, not neglectful of medicine hours, taking drugs regardless of feeling well and taking drugs even when experiencing side effects (Haynes, McDonald & Garg, 2004)

Hypertension is the commonest risk factor for stroke, heart failure, ischaemic heart disease and chronic kidney disease (Salamatu, Abubakar, Abdurrahman & Fatima, 2015). The mortality risk doubles for stroke and heart disease for every 20/10 mmHg increase in blood pressure ( Bryan, 2015). 12.8% of about 7.5 million deaths worldwide is hypertension related (World Health Report, 2002). In the UK, heart disease and stroke cost of equivalent £7.0 billion for stroke (Liu,

2002). Hypertension costs the United States \$46 billion each year. Disability Adjusted Life Years ( DALYs) is 57million which is 3.7% of total DALYs (WHO, 2008).

The blacks have more tendency in developing hypertension and its complications (DeLily, 2014). In Nigeria , there are no specific records on the cost of hypertension and its complications, however, it is the commonest risk factor for stroke, heart failure, ischemic heart disease and chronic kidney disease. (Ogah, 2006; Odugbemi,Onajole & Osibogun, 2012). Most people with complications of hypertension are over the age of 50 years, are in their prime and are in the work force (Fourcade, 2007)

Many Nigerians do not have access to health insurance to access prompt and adequate health care should a cardiovascular event occur , coupled with the fact that there is no optimal emergency intervention as obtainable in other parts of the world. Hence; a cardiovascular event is a nightmare to many in Nigeria. While financial may be reason for poor adherence ,the complications has a great burden on the patients and relatives because it affects the quality of life and the earning power. Cost of patient's care may be enormous and unaffordable hence, the vicious cycle continues.

Knowledge on hypertension appears not to be enough as many hypertensive patients still wish the complications of hypertension away without taking proactive preventive measures. Hence, primary prevention should be advocated for. As a result of the ecological perspective of the problems associated with treatment adherence in hypertension, this study used the PRECEDE framework to explore the predisposing factors, reinforcing factors and enabling factors that influence adherence to antihypertensive medications and life style modifications.

## **RESEARCH QUESTIONS**

1. What is the nature of the Personal-Level Predisposing Factors (PLPF) involved in treatment adherence among the participants in this study?
2. What is the nature of the Environmental-Level Reinforcing Factors (ELRF)
3. What is the nature of Environmental Level Enabling Factors (ELEF) involved in treatment adherence?

## **GENERAL OBJECTIVE**

Factors associated with adherence to antihypertensive drugs was elucidated among twenty respondents in a faith-based institution in Ogun State

## **RESEARCH DESIGN**

The qualitative study explored the factors influencing adherence antihypertensive use among twenty respondents in a faith based institution in Ogun State.

## **METHODOLOGY**

This allowed flexibility in gaining in depth interview of the problem. The conceptual framework that will guide this study is the PRECEDE MODEL (Green & Kreuter, 2005)

## **SAMPLE SELECTION**

Participants were known hypertensive recruited by convenience method in a faith-based institution in Ogun State. Inclusion criteria include: Participants aged 18years and above ,

Participants who gave their consent ,Exclusion criteria ,Persons who are below 18years, Persons who do not give their consent.

## **METHOD OF DATA COLLECTION**

Qualitative data was obtained via interview from twenty (20) respondents in a faith based institution in Ogun State. Consent of the patients were obtained. Questions were asked by the interview and an assistant recorded the responses with a tape recorder while another wrote the responses verbatim. All interviews were transcribed verbatim and were analyzed for thematic content. This approach allowed flexibility in gaining in-depth knowledge of the problem. Interview focused on knowledge of hypertensive and antihypertensive drug use, attitude towards anti- hypertension drug use, Belief of the patients on hypertension, self-efficacy, physician communication style, social support, enabling factor like health insurance, and affordability of drugs.

## **RESULT**

The mean age of respondent is  $45.25 \pm 10.01$  years,70% of the respondents were females, 30% of the respondents were males. The distribution in terms of educational status is as follow: No formal education 20% , primary education 40%, secondary education 40%. 25% of the respondents are unemployed, 75% of the respondents are employed. According to the marital status, 20% are single, 60% are married,20% are divorced or separated. Respondents of the Yoruba ethnic tribe constitute, 70% and Igbos 30%. All the Respondents are Christians According to the duration of being diagnosed to be hypertensive patient and on antihypertensive medications, 20% less than a year, 50% about 5 years and 30% more than 5 years.

The predisposing factors associated with adherence are knowledge of respondents about hypertension and hypertension, attitudes towards using blood pressure drugs and following lifestyle changes, belief about taking blood pressure drug and adherence self-efficacy

The Environmental Level Enabling Factor associated with adherence to were proximity to the clinic, skill for home blood pressure monitoring, skill to adjust drugs to match physician's goal, health insurance coverage, affordability of drugs, flexibility of clinic hours and patient's waiting time. Findings from this study showed that the Personal Level Predisposing Factors to adherence to antihypertensive drug use are knowledge, attitude, belief and self-efficacy.

The Environmental Level Reinforcing Factors associated with adherence to antihypertensive drug use are social support and provider communication style.

## **DISCUSSION**

Respondents had little knowledge about hypertension, beliefs and treatment about hypertension, which is reflection of the cultural belief. This was similar to study done by Ingram (2010).

Poor physician communication style and social support are important factors influencing adherence to antihypertensive use . Adherence to therapy increases as social support and physician communication is effective. (Sobowale, 2017)

## **RECOMMENDATIONS**

Financial constraint and inflexibility of clinic hours contribute to poor adherence (Xin, Chu, Jing; Wall & Carma, 2010) The church as a faith-based institution is an instrument of economic , political and social change. Through partnership with the health personnels, traditional beliefs about hypertension and its management can be disuaded. The role of the church in rendering patient sensitive medical care cannot be over emphasized. Patients' social support could be widened in the church.

Financial aid could be given or health care could be rendered at subsided rate or if possible at no cost if the church can partner with non-governmental organisations. Many churches today are establishing hospitals but these are under utilised because of financial constraint from their members. Hence, better health insurance coverage should be advocated for and established by the church.

## REFERENCE

- Bryan, W.,(2015). Essential Hypertension—Definition, Epidemiology and Pathophysiology. DOI 10.1093/med/9780199204854.003.161701\_update\_001
- Chukwu O. (2011) Heart Disease, Stroke Cost Nigerian \$800m yearly. Pmnews. Available at [http://www.pmnews Nigeria.com/2011/09/21/heart-diseasestroke-cost-nigeria-800m yearly](http://www.pmnews Nigeria.com/2011/09/21/heart-diseasestroke-cost-nigeria-800m-yearly)
- DeLilly C.R., (2014). Psychosocial Factors Affecting Blood Pressure Outcomes among Young African American Men<http://escholarship.org/uc/item/43h1756g>
- Elliot, 2004. Hypertension in Patients with Diabetes: Overcoming Barriers to Effective Control. *Postgrad Med* 2000;107:29-32, 35
- Familoni, O, & Aina, 2004. Knowledge and Awareness of Hypertension Among Patients With Systemic Hypertension. *J Natl Med Assoc*; 2004;96:620-624
- Fourcade, L., Paule, P., & Mafart, B., (2007). Hypertension Artérielle en Afrique Subsaharienne. *Actualité et Perspectives. Med Trop (Mars)* 2007;67:559–68.
- Green & Kreuter, 2005. ). CDC's Planned Approach to Community Health as an application of PRECEDE and an inspiration for PROCEED. *Journal of Health Education* 23(3): 140–147
- Haynes, McDonald & Garg, 2004. Can Simple Clinical Measurements Detect Patient Noncompliance? *Hypertension* ;2:757-764
- Ingram, R. R., (2010). Health Literacy and Adherence to Antihypertensive Regimens in African Americans Ages 50 and Older. 129 pp.
- Liu, 2002 (2002). The Economic Burden of Coronary Heart Disease in the U K.
- Nicki, Brian and Stuart, 2014. Davidson's Principles of Practice of Medicine. 21st Edition
- Ogah, O.S.,(2006). Hypertension in Sub-saharan African Populations: the Burden of Hypertension in Nigeria. *Ethn Dis* 2006;16(4):76

Salamatu, Abubakar, Abdurrahman & Fatima (2015) Prevalence of Physical Inactivity, Hypertension, Obesity and Tobacco Smoking: A Case of NCDs Prevention among Adults in Maiduguri, Nigeria. *American Journal of Medical Sciences and Medicine*. Vol.3, No.4, 2015, pp 39

Sobowale, T (2017). Factors Associated With Poor Adherence to Antihypertensive use and Level of Blood Pressure Control Among Hypertensive Patients Attending the Out-Patient Clinic in a General Hospital, Ogun State.

Wariva, E., January J., & Maradzika J., (2014). Medication Adherence Among Elderly Patients With High Blood Pressure in Gweru, Zimbabwe. *Journal of Public Health in Africa* 2014; 5:304 doi:10.4081/jphia.2014.304.

WHO, (2008). Global Health Observatory Data (GHO). Raised Blood Pressure Situation and Trends. World Health Organization-International Society of Hypertension.

WHO, (2002): Reducing Risks, Promoting Health Life. Geneva. Switzerland: World Health Organization; 2002.

Xin, Chu, Jing, Wall, Carma, (2010). Non-Adherence to Antihypertensive Medication Among Hypertensive Adults in the United States—HealthStyles, 2010. *The Journal of Clinical Hypertension*

,