
**The Socio-Economic Demographics for Adult Hypertensive Patients
Attending Thika Level 5 Hospital; Kenya.**

Okemwa O. Boaz, Dr.Zipporah Ndungu, Ann Thuita, Nyanchama Julie Nyamao

Abstract

1. Introduction: Chronic and non-communicable diseases pose a big health challenge to populations worldwide causing unnecessary suffering and premature deaths. Worldwide, hypertension is the third leading risk factor contributing to death and is common and treatable but uncontrolled hypertension has serious effects. Patient's knowledge, attitudes and practices have an impact on the management of hypertension and can help formulate a prevention program and improving the existing nutritional management practices if appropriate can cause a major impact on hypertension related complications and mortalities. **Objective:** To determine the socio-economic demographics among adult hypertensive patients attending the Thika level 5 hospital. **Methods:** A cross-sectional study design was used to determine socio-economic demographics of these patients with respect to the nutritional management of hypertension. An interviewer guided questionnaire was used to collect the data. The Statistical package for social sciences (SPSS) and nutri-survey were used to analyze the data. **Result:** A total of 173 patients participated in this study. Slightly more than half; 56% (N=97) were women and the remaining; 44% (N=76) were men. The mean age of the participants was above 40 years old. More than half of the patients (69.9%) were married; single participants accounted for 6.9%, divorced participants for 6.4%, and widowed participants accounted for 16.8% of the total. From the findings, a majority were Christians at 95.4% while the remainder of 4.6% was Muslim. The level of education was low among the study population: a majority 69.9% attaining only up to primary level education, 24.3% had secondary school level of education, and only 5.8% reported to have had tertiary/college education. **Conclusion:** Patient Socio-economic status of the hypertensive patients aged above 30 years as indicated by their educational levels, occupation and income showed that most of the individuals had at least primary school education. Most of the patients in this community were married and most of them were not on salaried employment and all the members of the study group were categorized in the lower income group. Understanding how these factors affect the management and contribute as risk factors to the disease will help in developing the appropriate care plan. This will ensure healthy lives and promote wellbeing for all in line with the sustainable development goal number 3. It is also important to understand these patient factors in order to develop effective strategies that identify the patient as a key participant in the management of their health.

Keywords: Hypertension, knowledge, attitudes, practices, non-communicable diseases, management.

Introduction

A healthy lifestyle plays a key role to the management of hypertension at almost all levels of the Disease. A healthy lifestyle might help to decrease blood pressure, enhance antihypertensive drug efficacy and decrease the total cardiovascular risk (Anowie & Darkwa, 2016)⁷. In some studies of population, there were noted high rates of obesity, smoking, physical inactivity and poor dietary habits in participants reporting hypertension (Steptoe, 2013). Obtaining information about the level of awareness towards the knowledge, attitudes and practices on nutritional management will be the first step in formulating a prevention program and improving the existing nutritional management of hypertension and cardiovascular diseases associated to it.

Reports show that out of the 1 billion estimated patients of hypertension worldwide, about two thirds are from developing or underdeveloped countries. Estimating that by 2030, mortality due to cardiovascular diseases in the adult population will reach 23 million with about 85% of such deaths occurring in low and middle-income countries (Anowie & Darkwa, 2016)³. This can be prevented or reduced through the implementation of proper management, key among which includes nutritional management. The disease burden of this worldwide shows that hypertension is the third leading risk factor contributing to death, surpassed only by Malnutrition and smoking (Medicine, 2011)⁶. Hypertension is common and treatable but uncontrolled hypertension has serious effects making preventive measures and the control of blood pressure of high Priority. Hypertension can rarely be mentioned without the inclusion of cardiovascular diseases because of their interaction and risk relationship.

The current NCD situation in Kenya shows that the country has a relatively young and rural population. Less than one quarter of this population lives in urban areas and the other slightly above one quarter is aged between 30 and 70 years old (WHO, 2014).

This population structure is transitioning with the fastest growing group in Kenya's population being adults. The number of adults in Kenya is expected to almost triple in size from 21 million to about 60 million in 2050 (Brouwer & Kariuki, 2015)⁸ and this also means an increase in the number of people at risk of these diseases. This is attributed to the fact that age is considered a non-modifiable risk factor. An increase in prevalence of hypertension has been detected in Ethiopia and is consistent with the global trend (Gudina et al, 2013)

We can however help modify those that are able to be manipulated to the benefit of human's health especially in relation to non-communicable diseases such as hypertension.

Materials and Methods

This was a descriptive cross-sectional study conducted among adult hypertensive patients presenting to the Thika level 5 hospital Kiambu, Kenya between September 2018 and April 2019. All participants in this study provided informed consent, which was approved by the Thika level 5 Hospital Ethics Committee. Patients were screened in the outpatient hypertension clinic when they came for follow up and treatment. Patients presenting above the age 18 years with a history of hypertension and able to communicate qualified for the study. A standard interviewer

guided questionnaire was used to collect information on socio-economic and demographics, knowledge, attitudes and practices towards the nutritional management of hypertension. SPSS version 17 and Nutri-survey were used for data analysis.

Results

Socio-economic and demographic characteristics of respondents.

During the study period, a total of 173 patients were included in the study and interviewed. Out of this, there were 56% (N=97) women and 44% (N=76) men. The mean age of the interviewed members was above 40 years. More than half of the patients (69.9%) were married; single participants accounted for 6.9%, divorced participants for 6.4%, and widowed participants accounted for 16.8% of the total.

A majority of the participants were Christians at 95.4% while the remainder of 4.6% constituted of Muslims. There were no other religious groups from the sample interviewed. The level of education was low among the study population: a majority 69.9% attaining only up to primary level education, 24.3% had secondary school level of education, and only 5.8% reported to have had tertiary/college education. Occupation status of the participants largely leaned towards self-employed 48.0% and unemployed at 42.8%. Only 4.04% were salaried employees and a further 5.2% who were casual laborers.

The income range stood at a majority 78.0% earning below 10,000 shillings a month, a further 16.25% earning between 10-15,000 shillings per month, a meager 5.8% earning between 15-20,000 shillings a month and nobody among the participants earned above 20,000 shillings a month. 60.1% of this population lived in rural areas while the remaining 39.9% was from urban areas. The household size was mainly 1-3 members 56.15, closely followed by 4-6 members at 39.9% and only a minority 4.0% had a household size of between 7-9 members.

Socio-economic and socio demographic status was defined in this study as the status of the members of the household based on their educational levels, occupation, areas of residence (rural or urban) and income. Distribution of these variables is shown below.

Table 1: *Socio-demographic and socio-economic characteristics of respondents*

Variables	Frequency (N=173)	Percentage (%)
Sex		
Males	76	43.9
Females	97	56.06
Age (in years)		
30 – 39	12	7.0
40 years and above	161	93.0
Marital status		
Married	121	69.9
Single	12	6.9
Divorced	11	6.4
Widowed	29	16.8
Religion		
Muslim	8	4.6
Christian	165	95.4
Level of education		
Primary level	121	69.9
Secondary level	42	24.3
Tertiary/College	10	5.8
Occupation		
Self-employed	83	48.0
Unemployed	74	42.8
Salaried employee	7	4.04
Casual worker	9	5.2
Income range		
<10000	135	78.0
10000-15000	28	16.2
15000-20000	10	5.8
>20000		
Area of residence		
Rural	104	60.1
Urban	69	39.9
Number of household members		
1-3	97	56.1
4-6	69	39.9
7-9	7	4.0

DISCUSSION.

Socio-demographic and socio-economic characteristics

There are more females (56.06%) than males (43.9%) in the study may be due to the fact that more often than not they are considered to have better health seeking behavior, hence there is the tendency for them to patronize the hospital more frequently as they can adhere to the treatment (Richard S Coper, 1998)⁹. There is also the gender issue in some Kenyan cultures and health promotion messages including those of this region that lays more emphasis on female and young child health (Richard S Coper, 1998)¹⁰.

An interesting observation in this survey was that the patients, particularly the females, tended to develop hypertension with age, while those aged between 30-39 years old making up only 7.0% and another 93% constituting of those above the age of 40 years old. This can be explained by the fact that hypertension has been observed to increase with age or that the younger population are not attending the clinics.

A large majority (69.9%) of the respondents had schooling below high school level, with only 5.8% having received tertiary education, as presented in the results region. Consequently that might explain the fact that most of these patients (48.0%) are self-employed in small jobs and another (42.8%) are not employed but also keeping in mind that the age of some of the participants meant that they had retired from active employment especially those above 60 years, leaving only a mere (4.04%) as salaried employees. This has further been illustrated in the income ranges with (78.0%) earning below 10,000 kshs per month and only (5.8%) earn above 20,000ksh. The Kenya National Bureau of Statistics states income groups categories as: lower-income group where individuals earn KES 23,670 or less per month, middle-income group earns KES 23,671 to KES 120,000 per month and upper-income group earns above KES 120,000 per month (Statistics, 2010)¹¹. Based on this categorization, all of the individuals in this study were in the lower-income group.

This study was unique because more people seemed to come from rural areas (60.1%) compared to those from urban areas (39.9%). This was different from earlier studies that covered both urban and rural areas in Ghana did report the prevalence of hypertension as being higher in the former than the latter and increased with increasing age ranging from 19.3% in rural to 54.6% in urban areas as a result of increase in life expectancy and rapid urbanization. (Francesca Anowie, 2015)¹².

Those married were (69.9%) of the total perhaps explaining the high attendance rate compared to the single (6.9%), divorced (6.4%) and widowed (16.8%). This was seen from the accompanying spouses who brought their sick partners to the clinic improving attendance.

REFERENCES

1. Anowie, F., & Darkwa, S. (2016). The Knowledge, Attitudes and Lifestyle Practices of Hypertensive Patients in the Cape Coast Metropolis-Ghana. *Journal of Scientific Research and Reports*, 8(7), 1–15. <https://doi.org/10.9734/JSRR/2015/19891>
2. Anowie, F., & Darkwa, S. (2016). The Knowledge, Attitudes and Lifestyle Practices of Hypertensive Patients in the Cape Coast Metropolis-Ghana. *Journal of Scientific Research and Reports*, 8(7), 1–15. <https://doi.org/10.9734/JSRR/2015/19891>

3. Brouwer, E., & Kariuki, C. (2015). Post-2015 Development Agenda.
4. Francesca Anowie, S. D. (2015). The knowledge, attitudes and lifestyle practices of hypertensive patients in the cape coast metropolis- Ghana. *Journal of scientific research and reports* , 1-15.
5. Godfrey BS Iyalomhe, S. I. (2010). Hypertension related knowledge, attitudes and life-style practices among hypertensive patients in a sub-urban Nigerian community. *Journal of Public Health and Epidemiology* 2(4), 71-77.
6. John Benson, N. B. (2006). What effects do patients feel from their anti-hypertensive tablets and how do they react to them? Qualitative analysis of interviews with patients. *Family practice* 23(1), 80-87.
7. Kebede Gudina, E., Michael, Y., & Assegid, S. (2013). Prevalence of hypertension and its risk factors in southwest Ethiopia: A hospital-based cross-sectional survey. *Integrated Blood Pressure Control*, 6(February 2015), 111–117. <https://doi.org/10.2147/IBPC.S47298>
8. Medicine, S. (2011). To Determine the Knowledge, Attitudes and Perceptions of Hypertensive Patients Towards Lifestyle Modification in Controlling Hypertension, (October), 1–61.
9. Philip S. Wang MD, D. R. (2002). Noncompliance with antihypertensive medications. *Journal of General Internal Medicine* 17, 504-511.
10. Richard S Coper, J. S. (1998). Disease burden in sub-Saharan Africa: What should we conclude in the absence of data? *The lancet, viewpoint volume 351, issue 9097*, 208-210.
11. Richard S Coper, J. S. (1998). Disease burden in sub-Saharan Africa: What should we conclude in the absence of data? *The lancet, viewpoint volume 351, issue 9097*, 208-210.
12. Statistics, K. N. (2010). *The 2009 Kenya Population and Housing Census*. Nairobi: Kenya National Bureau of Statistics.
13. Steptoe, A., Breeze, E., Banks, J., & Nazroo, J. (2013). Cohort profile: The English Longitudinal Study of Ageing. *International Journal of Epidemiology*, 42(6), 1640–1648. <https://doi.org/10.1093/ije/dys168>
14. World Health Organization. (2010). Global status report on non communicable diseases 2010. *World Health*, 176. <https://doi.org/9789241564229>.
15. World Health Organization. (2014). Kenya. *Noncommunicable Diseases (NCD) Country Profiles*, 2014. Retrieved from http://www.who.int/nmh/countries/ken_en.pdf?ua=1