

Research Article

Knowledge and Perception of Hypertension in an Urban Community in Cross River State, Nigeria

Dr. Obaji Etaba Obaji Akpet*, Dr. Nkese Mkpnam, Dr. Nnette Ekpenyong Okon, Dr. Taiwo Oyeniyi, Dr. Benson Obu

Department of Community Medicine, University of Calabar/University of Calabar Teaching Hospital Nigeria

Article History

Received: 14.12.2020

Accepted: 29.12.2020

Published: 09.01.2021

Journal homepage:

<https://www.easpublisher.com>

Quick Response Code



Abstract: Hypertension is still a global burden till date with highest prevalence shifting from the high- and middle-income countries to the low-income countries of the world. Also, adequate knowledge and right perception of hypertension is still very low in such countries which most countries in sub-Saharan Africa belong. The study aims to determine the knowledge and perception of hypertension with associated factors in Ugep, an urban community in South-southern part of Nigeria. A descriptive cross-sectional study was conducted among adults (18 years and above) residing in Ugep community of Cross River State in South-southern Nigeria. A total of 192 consenting adults were recruited consecutively into the study during a medical outreach organized by Medical and Dental Consultant Association of Nigeria in August, 2017. Majority of the study participants (81.3%) demonstrated poor knowledge of hypertension while only a few of them were still holding wrong perceptions about the causes of hypertension. Among the socio-demographic factors explored, only educational status showed a significant association ($p = 0.02$) with the knowledge of hypertension among the study participants having no formal education being the poorest (93.0%). The knowledge of hypertension is still low among the Ugep community of CRS with some level of wrong perception about hypertension still persistent. Continuous education of the adult population of Ugep community is advocated in order to improve knowledge and perception of hypertension.

Keywords: Knowledge, Perception, Hypertension, Urban, Community, Nigeria.

Copyright © 2021 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

INTRODUCTION

Hypertension still remains a global burden till date with prevalence ranging from 4% to 78% from recent studies which also showed a crude increase in the last decade especially after year 2000[1]. In 2010, the first systematic analysis of global health disparity in hypertension revealed that an estimated 1.39 billion people had hypertension with 31.1% of the world's adult population affected [2]. Also, the highest worldwide prevalence has shifted from high- and middle-income countries to the low-income countries (epidemiologic transition) mostly due to change of lifestyle [1]. In the middle- and low-income countries, systematic review and meta-analysis of recent studies has further shown highest pooled prevalence among the upper middle-income countries and lowest pooled prevalence across low-income countries of the world [3]. In Nigeria, recent studies still revealed relatively high prevalence of hypertension with a crude prevalence ranging to as high as 17.5% in children and 47.3% in adult[4].

Hypertension remains the most important modifiable risk factor for controlling Cardiovascular Diseases (CVDs), renal failure, premature death and

disability [5]. Hence, good knowledge and perception of hypertension which forms the basis of primary preventive strategies will go a long way in reducing the global burden. Unfortunately, knowledge and perception of hypertension and other risk factors for CVD is generally low in sub-Saharan Africa [6]. In Nigeria, there is paucity of information on knowledge about hypertension and other CVD risk factors especially among the general population [7], hence the need for more studies to be conducted outside the hospital setting which will better inform strategies targeted at controlling hypertension.

This study was aimed at assessing the knowledge and perception of hypertension in Ugep community in Cross River State (CRS), which is a typical urban community in Nigeria.

METHODOLOGY

Study was carried out in Ugep, the largest native community in Cross River State, Nigeria in Yakkur Local Government Area (LGA), which is one of the six urban LGAs in Cross River State. It's was a descriptive cross-sectional survey of 192 consenting adults (aged 18 years and above) during a medical

outreach organized by the Cross River State chapter of the Medical and Dental Consultant Association of Nigeria (MDCAN) in August, 2017.

The purpose of the study was elaborately explained to every adult that came for the outreach and only those that consented were recruited for the study. Critically ill adults and those who refused consent were excluded from the study.

Data was collected via interviewer administered questionnaires by trained research assistants who covered information on participant's sociodemographic background, knowledge and perception of hypertension. Due to the usual rowdy nature of most medical outreaches, a separate and enclosed area was designated for the interview in order to provide the participants the level of comfort and confidentiality needed to achieve unbiased responses. Each consenting adult thereafter was interviewed.

Administered questionnaires were then coded, screened and entered using IBM SPSS Statistics version 21. Data was displayed and summarized using tables and charts. Chi-square test of independence was used to test for relationships between various sociodemographic factors and hypertension knowledge among respondents.

Ethical clearance was obtained from the State's Ethical Committee and signed consent from individual participant after explaining the whole process to their understanding before commencement of the study.

RESULTS

Socioeconomic characteristics of the respondents

Table I shows the socioeconomic characteristics of the respondents. A total of 192 adults (18 years and above) participated in the study aged between 18 and 86 years (mean age = 47.7 ± 17.3). Majority of the respondents fall within the age group of 41 – 60 (38.5%) followed by age group 21 – 40 (35.4%) and 61 -80 (20.3%) respectively. The respondents were mostly females (68.2%) while the rest (31.8%) were males. Most of the respondents were either married

(41.4%), single (27.6%) or widowed (21.4%) while the rest are cohabiting (7.8%), divorced (1.6%) or separated (0.5%). They are predominantly of Ekoi ethnic (95.3%) and majority is Christians (97.4%). Most of the respondents have no formal education (29.7%) while a handful of them finished primary school (27.1%) and secondary school (27.1%); the rest (16.1%) completed tertiary education. Predominant occupations were subsistent farming (44.8%), petty business (15.6%) and civil service (11.5%).

Knowledge of hypertension

Knowledge of hypertension among the respondents was generally poor. Table II shows the overall knowledge of respondents on the symptoms and signs, causes, treatment and complications of hypertension. From the table, 81.3% of the respondents have poor knowledge of hypertension with only 18.8% of them having relatively good knowledge of hypertension.

Perception of hypertension

Considerable number of the respondents still has wrong perceptions about hypertension. As shown in table III, 57.7% believed that hypertension can be cured while only 46.4% believed hypertension can be prevented. However, 59.9% of them believed that hypertension can shorten lifespan. Also, a few of the respondents were still holding on to wrong community beliefs about causes of hypertension such as punishment from the gods (9.4%), witches and wizards (8.9%), angry neighbours (7.3%), revenge from offended family members (6.3%) and reward of disobedience (3.1%). On the average, majority (82.5%) of them were not really sure if such believes are true.

Predictors of hypertension knowledge

Among other sociodemographic factors, level of hypertension knowledge is only significantly associated with the respondent's educational status ($p = 0.04$) with worsened poor knowledge recorded among those that have no formal education. Other sociodemographic factors such as age, religion, marital status, occupation and tribe were not significantly associated with level of hypertension knowledge as shown in table IV.

Table-I: Sociodemographic characteristics of respondents in Ugep community of Cross River State, Nigeria

Variables	Frequency	Percentage (%)
Age		
1 – 20	7	3.6
21 – 40	68	35.4
41 – 60	74	38.5
61 – 80	39	20.3
81 – 100	4	2.1
Mean Age \pm SD = 47.7 ± 17.3		
Sex		
Male	61	31.8
Female	131	68.2

Marital Status		
Single	53	27.6
Cohabiting	15	7.8
Married	79	41.4
Separated	1	0.5
Divorced	3	1.6
Widowed	41	21.4
Ethnic Group		
Ekoi	183	95.3
Efik	3	1.0
Ibibio	2	0.5
Others	4	2.0
Religion		
Christianity	187	97.4
Islam	2	1.0
Traditional	3	1.6
Educational Status		
No formal Education	57	29.7
Primary Education	52	27.1
Secondary Education	52	27.1
Tertiary Education	31	16.3
Occupation		
Civil Servant	22	11.5
Self Employed	11	5.7
Petty Business	30	15.6
House Wife	2	1.0
Peasant Farmers	86	44.8
Others	41	21.4

Table-II: Frequency distribution of overall knowledge of hypertension among respondents in Ugep community of Cross River State, Nigeria.

Level of hypertension knowledge	Frequency	Percentage (%)
Poor	156	81.3
Good	36	18.7
Total	192	100.0

Table-III a: Perception of hypertension among respondents in Ugep community of Cross River State, Nigeria

Variable	Frequency of respondents	
	Yes (%)	No (%)
Hypertension		
a. Can be cured	107 (55.7)	85 (44.3)
b. Can be prevented	89 (46.4)	103 (53.6)
c. Can shorten lifespan	115 (59.9)	77 (40.1)

Table-III b: Perception of community beliefs among respondents on causes of hypertension in Ugep, Cross River State, Nigeria

Variable	Frequency of respondents		
	Yes (%)	No (%)	Don't know (%)
Community believes about hypertension			
a. Punishment from gods	18 (9.4)	16 (8.3)	158 (82.3)
b. Witches and wizards	17 (8.9)	17 (8.9)	158 (82.3)
c. Angry neighbours	14 (7.3)	19 (9.9)	159 (82.8)
d. Revenge from offended family members	12 (6.3)	21(10.9)	159 (82.8)
e. Reward for disobedience	7 (3.6)	21(14.1)	158 (82.3)

Table-IV: Sociodemographic predictors of hypertension knowledge among respondents in Ugep community, Cross River State, Nigeria

Variables	Level of hypertension knowledge		Chi-square	P-value
	Poor (%)	Good (%)		
Age				
1 – 20	5 (71.4)	2 (28.6)	7.51	0.11
21 – 40	51 (75.0)	17 (25.0)		
41 – 60	60 (81.1)	14 (18.9)		
61 – 80	36 (92.3)	3 (7.7)		
81 – 100	4(100.0)	0 (0.0)		
Sex				
Male	48 (78.7)	13 (21.3)	0.38	0.33
Female	108 (82.4)	23 (17.6)		
Marital Status				
Single	40 (75.5)	13 (24.5)	8.72	0.12
Cohabiting	9 (60.0)	6 (40.0)		
Married	67 (84.8)	12 (15.2)		
Separated	1(100.0)	0 (0.0)		
Divorced	2(66.7)	1 (33.3)		
Widowed	37 (90.2)	4 (9.8)		
Ethnic Group				
Ekoi	148 (80.9)	35 (19.1)	6.68	0.35
Efik	3 (100.0)	0 (0.0)		
Ibibio	2 (100.0)	0 (0.0)		
Others	3 (75.0)	1 (25.0)		
Religion				
Christianity	152 (81.3)	35 (18.7)	4.25	0.24
Islam	1 (50.0)	1 (50.0)		
Traditional	3 (100.0)	0 (0.0)		
Educational Status				
No formal Education	53 (93.0)	4 (7.0)	9.12	0.02*
Primary Education	38 (73.1)	14 (26.9)		
Secondary Education	40 (76.9)	12 (23.1)		
Tertiary Education	25 (80.6)	6 (19.4)		
Occupation				
Civil Servant	15 (68.2)	7 (31.8)	8.72	0.12
Self Employed	8 (72.7)	3 (27.3)		
Petty Business	23 (76.7)	7 (23.3)		
House Wife	1 (50.0)	1 (50.0)		
Peasant Farmers	77 (89.5)	9 (10.5)		
Others	32 (78.0)	9 (22.0)		

*Fishers Exact

DISCUSSION

This study is peculiar due to the fact that it was carried out during an outreach; hence the natural tendency of drawing participants from across various sociodemographic groups in the community. However, gender representation seems to have tilted more towards the female participants which may be due to the fact that most of the male residents are usually not around during early hours of the day when the outreach took place. Also, the predominant ethnic group is Ekoi which is understandably native ethnic group of Ugep community while the most predominantly practiced religion is Christianity, the commonest religion in Cross River State.

The study revealed poor level of hypertensive knowledge in this sample of adult living in an urban area of south-southern Nigeria. These findings demonstrated worse hypertensive knowledge when compared with results from another study among hypertensive patients attending clinic in a sub-urban area in south-southern Nigeria [8]. This is not out of place since hypertensive patients attending clinic for treatment are expected to have had some improvement in their knowledge of hypertension as a result of various health education and counselling sessions with health professionals as part of their management. However, another population based study in south-western part of Nigeria showed a comparably low level of hypertension knowledge among other CVD risk factors but not as

low as we found out in this study. This could be due to difference in the general level of educational status among other factors, which varies with study settings and it's invariably one the predictors of hypertension knowledge among other risk factor from the south-western population based study in Nigeria[7].

In addition to the findings above, our study also revealed that a number of wrong perceptions about hypertension are still being held by many of the participants. These include wrong perceptions about prevention, cure and effect of hypertension on individual's lifespan. Also many of the respondents still hold to some wrong community beliefs about causes of hypertension. Many still agree with the notions that hypertension can be caused by punishment from gods, witches and wizards, angry neighbours, revenge from offended family members and reward of disobedience. Consequently, the predominance of such wrong perceptions about hypertension may invariably affect the health seeking behaviour of such adult population negatively.

Lastly, this study showed that among many sociodemographic factors such as age, sex, religion, ethnicity, marital status, occupation and educational status, hypertension knowledge was only significantly affected by respondents' educational status. This is in agreement with the study carried out in south-western Nigeria whereby hypertensive knowledge was found to increase with increase educational status [7]. However, the same trend could not be established in our study which worsened hypertension among people with no formal education. In any case, one could infer that individual's educational attainment may play a major role in their knowledge about hypertension generally.

CONCLUSION

The knowledge of hypertension is low among adult population of Ugep community in CRS with considerable level of wrong perception about hypertension. As such, continuous health education of the adult population of Ugep community is highly imperative in order to improve their knowledge and perception about hypertension.

REFERENCE

1. Salem, H., Hasan, D. M., Eameash, A., El-Mageed, H. A., Hasan, S., & Ali, R. (2018). Worldwide prevalence of hypertension: A pooled meta-analysis of 1670 studies in 71 countries with 29.5 million participants. *Journal of the American College of Cardiology*, *71*(11S), A1819-A1819.
2. Mills, K. T., Bundy, J. D., Kelly, T. N., Reed, J. E., Kearney, P. M., Reynolds, K., ... & He, J. (2016). Global disparities of hypertension prevalence and control: a systematic analysis of population-based studies from 90 countries. *Circulation*, *134*(6), 441-450.
3. Sarki, A. M., Nduka, C. U., Stranges, S., Kandala, N. B., & Uthman, O. A. (2015). Prevalence of hypertension in low-and middle-income countries: a systematic review and meta-analysis. *Medicine*, *94*(50).
4. Akinlua, J. T., Meakin, R., Umar, A. M., & Freemantle, N. (2015). Current prevalence pattern of hypertension in Nigeria: A systematic review. *PloS one*, *10*(10), e0140021.
5. World Health Organization. (2013). *A global brief on hypertension: silent killer, global public health crisis: World Health Day 2013* (No. WHO/DCO/WHD/2013.2). World Health Organization.
6. Boateng, D., Wekesah, F., Browne, J. L., Agyemang, C., Agyei-Baffour, P., Aikins, A. D. G., & Klipstein-Grobusch, K. (2017). Knowledge and awareness of and perception towards cardiovascular disease risk in sub-Saharan Africa: A systematic review. *PLoS One*, *12*(12), e0189264.
7. Oladapo, O. O., Salako, L., Sadiq, L., Soyinka, K., & Falase, A. O. (2013). Knowledge of hypertension and other risk factors for heart disease among Yoruba rural southwestern Nigerian population. *Journal of Advances in Medicine and Medical Research*, 993-1003.
8. Iyalomhe, G. B., & 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.

Cite this article:

Obaji Etaba Obaji Akpet *et al* (2021). Knowledge and Perception of Hypertension in an Urban Community in Cross River State, Nigeria. *East African Scholars J Med Sci*, *4*(1), 18-22.