

AWARENESS OF HYPERTENSION AMONG UNIVERSITIES' STAFF IN SOUTH WESTERN NIGERIA

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Abstract

This study was designed to find out the level of awareness of hypertension among Universities' staff in south Western Nigeria. The cross sectional descriptive survey design was adopted for this study. The population for the study comprised of all Universities' staff in South Western Nigeria. A sample of 1800 selected using multistage random sampling technique was used. The instrument used for data collection was self constructed and was validated by three experts in health education and the reliability was determined using test re test method. A coefficient of 0.85 was obtained and this was considered adequate for the study. Data was analyzed with descriptive and inferential statistics to answer questions and test the hypotheses raised for the research. The analysis was done with the use of Statistical Package for Social Sciences (SPSS) version 20 and strata software using simple percentages, bar graph and correlation statistics at 0.05 level of significance. Findings revealed that: Universities' staff in South Western Nigeria have adequate awareness of hypertension; Age, Gender, and Religion have significant influence on awareness of hypertension among Universities' staff in South Western Nigeria but institution type has no significant influence It was recommended that: lifestyles that helps in controlling and preventing hypertension should be encouraged alongside routine visit to the University health centers for checkup, and recreational facilities should be provided for the population.

Keywords: Awareness, hypertension, universities' staff, south Western Nigeria.

Background of the study

Hypertension represents the most common chronic disease in the Western World with an estimated prevalence in the population of more than 25%, and a major risk factor for cardio vascular diseases including coronary artery diseases, heart failure and stroke, chronic kidney disease and death (Sarafidis, 2011). While hypertension related complications are preventable, lack of public awareness and misconceptions about hypertension and hypertensive complications are common and may in part, be associated with ongoing inadequate awareness, treatment and control rate for hypertension. Bosu (2015) reported that there is high prevalence of hypertension among West Africa's workforce of which a significant proportion is undiagnosed, severe or complicated. Wang (2012) reported that prevalence of hypertension in China was 18.8%. despite that, the treatment rate among hypertensive patients was 82%, the control rate remained low in persons with hypertension (6%) because of the low awareness in general (30%) and the low control rate among treated hypertensive patients (25%). The crude prevalence of hypertension increased progressively from 12.9% in studies published in the 1980s to 34.4% in those published in 2010-2014. The population of hypertensives who were previously aware of their diagnosis, were on treatment or had their blood pressure controlled was 19.6-84.0%, 0-79.2% and 0-12.7% respectively. Hypertensive subject, including health workers, rarely checked their blood pressure except when they were ill (Bosu, 2015). Xu, et al. (2010), in a study carried out in China, 16% monitored their own blood pressure regularly. Female hypertensive subjects have more effectively controlled blood pressure than their male counterpart. Participants with B.Sc. or higher educational qualification had a lower awareness rate and treatment rate but a higher control rate. Many studies have been carried out on awareness of hypertension and the findings have varied from place to place

Blood pressure is the pressure that the blood exerts on the inner walls of the blood vessels which vary in different phases of contraction of the heart and under different conditions of health exertion. High blood pressure accounts for high mortality in the form of coronary heart disease and usually has no warning signs. Hence, it is referred to as 'silent killer'. Hypertension awareness and blood pressure monitoring is a good way of preventing and controlling this deadly disease which is the most common reason for adult clinic visit other than pregnancy and has the highest use of prescription drugs. Despite the number of resources used to treat this disease, only about 50% of hypertensives have their blood pressure under control. Good health is central to human happiness and well-being. It contributes greatly to economic progress of a nation as healthy population live longer, are more productive and efficient in their places of work. In many developing countries few people go for medical checkups to monitor signs and symptoms associated with non-communicable diseases, and Nigeria is not an exception. Currently, fewer than four percent of Nigerians are covered by National Health Insurance Scheme, these include civil servants working for federal government, women and children under the maternal and health project which is funded by U.S government. There are plans to roll out coverage for such basic and essential health services including access to diagnosis and treatment for hypertension under a national health bill, which federal government is currently considering.

Given the lack of routine blood pressure check in Nigeria, it is not surprising that the country's statistics on hypertension are unreliable, most are outdated speculations based on mathematical models and surveys that are scanty and unrepresentative with low validity. The lack of reliable data has made it very difficult for policy makers to concentrate on efforts to control the emerging health burden of disease control. Bosu (2015) reported that there is high prevalence of hypertension among West Africa's workforce of which a significant proportion is undiagnosed, severe or complicated. The

increasing prevalence of hypertension is attributed to population growth, ageing and behavioural risk factors such as unhealthy diet, harmful use of alcohol, lack of physical activity, excess weight and exposure to persistent stress. Adegboro (2016) reported that 5.8% of the study population (500) have their blood pressure above 140/90mmhg. In order to be able to plan for effective control of hypertension, there is need for adequate amount of reliable data on level of awareness of hypertension among the populace. The need to generate such data is the problem of this study.

The main purpose of the study is to find out the awareness of hypertension among universities' staff in South Western Nigeria. Specifically,

This research work aims to investigate:

- i. The level of awareness of hypertension among Universities' staff.
- ii. The relationship between age, gender, religion, and school ownership, and awareness of hypertension among Universities' staff.

Research Questions

The following questions were raised to guide the study

1. What is the level of awareness of hypertension among Universities' staff in South Western Nigeria?
2. What is the relationship between the following variables and awareness of hypertension among Universities' staff in South Western Nigeria: Age, Gender, Religion, and School Ownership?

Research Hypotheses

The following hypotheses were tested

1. Age will not have any significant influence on the level of awareness of hypertension among Universities' staff in South Western Nigeria.
2. Gender will not have any significant influence on the level of awareness of hypertension among Universities' staff in South Western Nigeria.
3. Religion will not have any significant influence on the level of awareness of hypertension among Universities' staff in South Western Nigeria.
4. School Ownership will not have any significant influence on the level of awareness of hypertension among Universities' staff in South Western Nigeria.

Significance of the Study

The findings of this study provided information that will guide health workers to be able to plan for effective prevention of hypertension; it has created awareness among the University staff; it has increased the literature on awareness of hypertension among the populace; it has revealed the relationship between Age, Gender, Religion, and School Ownership and awareness of hypertension among Universities' staff in South Western Nigeria and it will stimulate future researchers to carry out further studies on awareness of hypertension among the populace.

Method of the Study

The cross sectional descriptive survey design was adopted for this study. The population for the study comprised of all Universities' staff in South Western Nigeria. The sample of 1800 was used consisting of teaching and non-teaching staff. The study adopted a multi stage random sampling technique to select the respondents. The first stage involved the random selection of ten public and ten private

Universities from the south Western part of Nigeria, the second stage involved the random selection of three faculties each from the Universities earlier selected. The third stage involved the purposive selection of respondents both academic and non academic staff using population proportional to size. The instrument used for data collection is a self constructed, structured, and closed ended questionnaire designed and built around the research questions. It has thirty two items and was designed in line with the five point Likert scale with strongly agreed having 5points, Agree - 4points, Undecided- 3points, disagree- 2points and strongly disagree- 1point when the statement is positively framed and the scores are reversed when negatively framed. Awareness was computed as a composite of measure of the sum of all the items on Awareness. The instrument was validated by three experts in health education and the reliability was determined using test re test method. A coefficient of 0.85 was obtained and this was considered adequate for the study.

Data was analyzed with descriptive and inferential statistics to answer questions and test the hypotheses raised for the research. The analysis was done with the use of Statistical Package for Social Sciences (SPSS) version 20 and strata software using simple percentages, bar graph and correlation statistics at 0.05 level of significance.

RESULTS AND ANALYSIS

Research Question 1: What is the level of awareness of hypertension among Universities’ staff in South Western Nigeria?

Table 1: Descriptive statistics on level of awareness of hypertension

N	Valid	1800
	Missing	0
Mean		86.0500
Std. Deviation		9.87683
Minimum		49.00
Maximum		115.00

Table mean = 69

Table 1 revealed a statistical mean of 86.0500 which is greater than the table mean of 69. This means that the respondents have a high level of awareness about blood pressure.

Hypotheses 1: Age will not have any significant influence on the level of awareness of hypertension among Universities’ staff in South Western Nigeria.

Table 2: Relationship between Age and Awareness of hypertension

		Age	awareness
Age	Pearson Correlation	1	-.127**
	Sig. (2-tailed)		.000
	N	1800	1800
Awareness	Pearson Correlation	-.127**	1
	Sig. (2-tailed)	.000	
	N	1800	1800

Table 2 revealed a correlation value of $-.127$ which is significant (0.00) at 0.01 level of significance. This means that the hypothesis which says that age will not have any significant influence on the level of awareness of hypertension is hereby rejected, signifying that age has significant influence on the level of awareness of hypertension among University staff in South Western Nigeria.

Hypotheses 2: Gender will not have any significant influence on the level of awareness of hypertension among Universities' staff in South Western Nigeria.

Table 3: Relationship between Sex and Awareness of hypertension

		Sex	Awareness
Sex	Pearson Correlation	1	-.071
	Sig. (2-tailed)		.003
	N	1800	1800
Awareness	Pearson Correlation	-.071	1
	Sig. (2-tailed)	.003	
	N	1800	1800

Table 3 revealed a correlation value of $-.071$ which is significant (0.003) at 0.01 level of significance. This means that the hypothesis which says that gender will not have any significant influence on the level of awareness of hypertension is rejected, signifying that gender has significant influence on the level of awareness of hypertension among University staff in South Western Nigeria.

Hypotheses 3: Religion will not have any significant influence on the level of awareness of hypertension among Universities' staff in South Western Nigeria.

Table 4: Relationship between Religion and Awareness of hypertension

		Religion	Awareness
Religion	Pearson Correlation	1	-.080**
	Sig. (2-tailed)		.001
	N	1800	1800
awareness	Pearson Correlation	-.080**	1
	Sig. (2-tailed)	.001	
	N	1800	1800

Table 4 revealed a correlation value of $-.080$ which is significant (0.01) at 0.01 level of significance. This means that the hypothesis which says that Religion will not have any significant influence on the level of awareness of hypertension is rejected, signifying that religion has significant influence on the level of awareness of hypertension among University staff in South Western Nigeria.

Hypotheses 4: School Ownership will not have any significant influence on the level of awareness of hypertension among Universities' staff in South Western Nigeria.

Table 5: Relationship between Institution Type and Awareness of hypertension

		Institution type	awareness
Institution type	Pearson Correlation	1	.018
	Sig. (2-tailed)		.440
	N	1800	1800
Awareness	Pearson Correlation	.018	1
	Sig. (2-tailed)	.440	
	N	1800	1800

Table 5 revealed a correlation value of $.018$ which is not significant (0.440) at 0.05 level of significance. This means that the hypothesis which says that institution type will not have any significant influence on the level of awareness of hypertension is accepted, signifying that institution type has no significant influence on the level of awareness of hypertension among University staff in South Western Nigeria.

Limitations of the study

The major limitation of this study is the fact that it is a cross sectional study and the finding relied on the data generated from the respondent which is beyond the control of the researcher.

Discussion

The current results revealed that Universities' staff in South Western Nigeria have adequate awareness of hypertension. This finding can be linked to previous research on the level of awareness of hypertension among Universities' staff in Nigeria. For example, Abdullahi and Amzat (2011) in an investigation of the level of awareness of hypertension among the staff of University of Ibadan reported that the sample had high level of knowledge of the complications associated with hypertension. Nevertheless, in a similar study at Benue State University in the North Central Geo-Political Zone, Chinyere, Mwuese and Ara (2015) reported a low level of awareness of hypertension among University staff. However, these two studies were conducted in two different Geo-Political Zones and as such further studies may be required to validate the possible role(s) of geographical and cultural differences on the level of awareness of hypertension among University staff.

Furthermore, the current study revealed that age, gender, and religion had significant influence on awareness of hypertension among Universities' staff in South Western Nigeria, while institution type had no significant influence. This finding is at variance with Omorogiuwa, Ezenwanne, Osifo, Ozor and Ekhaton (2009) who in a comparative study of the risk factors for hypertension in a University setting in Southern Nigeria opined that gender was not a significant factor of diastolic hypertension difference between senior University staff and junior University staff. Though this divergent opinion emanated from a sample from the same geopolitical zone as the current study, the methodologies adopted in the studies were not the same. Thus, it could be that methodological influences played a role on the findings. Notwithstanding, readers are advised to exercise caution in the interpretation and application of the current findings and to take into account some of the divergent findings from the extant literature on this topic, while further research is recommended to investigate differences between the extant literature and the current study.

Implication for health education

The findings of this study have the following implications for health education:

- Level of awareness of hypertension is very high among Universities staff
- Age, gender, and religion are significant factors that can be used to disseminate information about hypertension.

Recommendations

After a critical look at the Awareness of hypertension, the following recommendations are proposed:

- Public health education lectures should be organised from time to time for all staff to sensitize them on the different aspects of hypertension and other non communicable diseases.
- Health educators should have a routine visit to members of staff who are above 40 years for health education on lifestyle diseases and the need for regular medical checkups.

Ethical consideration

Informed consent of each subject, ethical and official approval from the local research ethics committee of the Department of Human Kinetics and Health Education, Faculty of Education, Adekunle Ajasin University Akungba Akoko was obtained for the study and the investigation was performed in accordance with the principles outlined in the declaration of Helsinki.

References

- Abdullahi, A.A., & Amzat, J. (2011). Knowledge of hypertension among the staff of University of Ibadan, Nigeria. *Journal of Public Health and Epidemiology*. 3 (2) 204-209.
- Adegboro, J.S. (2016). Pattern of blood pressure distribution among members of Staff in Adekunle Ajasin University Akungba Akoko, Ondo State, Nigeria. *Saudi Journal of Medical and Pharmaceutical Science*. 2(8),209-214.
- Bosu, W. K. (2015). The prevalence, awareness, and control of hypertension among workers in West Africa: a systemic review. *Global Health Action*. www.ncbi.nlm.nih.gov/pmc/430675.
- Chinyere, O.I., Mwuese, U., & Ara, B. (2015). Prevalence and awareness of hypertension amongst staff and students of a tertiary institution in Nigeria. *Global Advanced Researched Journal of Medicine and Medical science*, 4(1), 061-066.
- Omorogiuwa, A., Ezenwanne, E., Osifo, C., Ozor, M., & Ekhaton, C. (2009). Comparative study on risk factors for hypertension in a University setting in Southern Nigeria. *International journal of Biomedical and Health Sciences*, 5(2), 103-107
- Sarafidis, P.A. (2011). Epidemiology of resistant hypertension. *J. Clin Hypertens (greenwich)*, 13(7), 523 -8.
- Wang, J.G. (2012). Characteristics of hypertension in Chinese and their relevance for the choice of antihypertensive drugs. *Diabetes Metab Res Rev. Suppl 2*: 67 – 72.
- Xu, T., Wang, Y., Li, W., Chen, W. W., Zhu, M., Hu, B., Chen, T., & Liu, B., (2010). Survey of prevalence, Awareness, treatment, and control of hypertension among Chinese government and Institutional employees in Beijing. *Clin Cardiol*, 33 (6), 66 –72.