

## An Assessment of the Knowledge and Attitude of Academic Staff of Aminu Saleh College of Education, Azare toward Hypertension

Idris Bappah Aliyu, Tata Umar Sa'ad, Magaji Shehu

Physical and Health Education Department School of Science Aminu Saleh College of Education, Azare  
(Affiliated to the University of Maiduguri)

Foundations Department School of Education Aminu Saleh College of Education, Azare Bauchi State, Nigeria

Foundations Department School of Education Aminu Saleh College of Education, Azare Bauchi State, Nigeria

Corresponding Author: Tata Umar Sa'ad

**Abstract:** Hypertension is common in our society today and its knowledge was inadequate, which affects the health of individuals and the community, this study therefore was an attempt to assess the knowledge and attitude of academic staff of College of Education, Azare toward hypertension. Descriptive survey design was used and the sample was 205 which were selected from the population of 404 by using disproportional stratified and quota sampling techniques. A questionnaire was used in the collection of data for this study and simple percentage and frequency counts were used in the analysis. The study revealed that most of the respondent had considerable high level of awareness toward hypertension but their attitude toward hypertension was relatively poor. Therefore, the study recommends that the college academic staff should be encouraged on the importance of regular blood pressure check-up so as to detect the condition in its early phase. Also in order to achieve a positive health behaviour, motivation and high level of productivity in the college environment, the college management should organize a timely campaign on blood pressure awareness in the form of seminars and conferences for all categories of staff.

**Keywords:** Knowledge, Attitude, Hypertension, Academic Staff

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### I. Introduction

In higher animals including human beings, blood is one of the essentials of life which circulate round the body and should be maintained at a normal pressure flow. Seventh report of the joint national committee on hypertension JNC 7 defines a blood pressure of less than 120/80 mm Hg diastolic as normal, 120 to 129/80 to 89 mm Hg as pre hypertension, and 140/90 mm Hg or higher as hypertension (Chobanian, Bakris, Black, 2003) The term Stage is used to define two levels of hypertension so that it is similar to the terms used to describe cancer progression; thus, the public and health care professionals will understand that consistently higher elevations in blood pressure from pre hypertension to stage 1 or 2 are associated with greater health risks. JNC 7 introduced the category of pre hypertension to emphasize that people whose blood pressure begins to rise above 120/80 mm Hg are more likely to become hypertensive, and that even small increases in pressure are associated with increased risk of stroke, heart attack, heart failure, and cardiovascular death (Hsia, Margolis, Eaton, 2007).

Blood pressure is the product of cardiac output multiplied by peripheral resistance. Cardiac output is the product of the heart rate multiplied by the stroke volume. In normal circulation, pressure is transferred from the heart muscle to the blood each time the heart contracts and then pressure is exerted by the blood as it flows through the blood vessels (Williams, 2007). It is essential to monitor or check blood pressure as the systolic pressure affects the efficacy of cardiac output and diastolic pressure reflects the peripheral resistance exerted by the arterioles. Maintenance of an adequate blood pressure is essential to permit perfusion of brain and coronary arteries and the production of urine by kidneys. When blood pressure is maintained at optimum levels in healthy adults, it controls the cardiac output and the peripheral resistance, so that a constant internal environment can be maintained. Thus prevent and control some of the cardiovascular diseases to give an individual a good optimum wellbeing (American Medical Association, 2010).

Hypertension is a term which is used to describe a high level of blood pressure that taking all other cardiovascular risk factors into accounts would benefit the patients if reduced (Waugh & Grant 2010). Hypertension is one among the cardiovascular diseases condition and it is referred to as "silent killer" because many people are affected often are not aware that they have the disease condition ( Panye & Halm,1998). Study and reports have shown that about 40 percent of Nigerian society are hypertensive due to sedentary lifestyle and those that are aware may not be on treatment and even being treated may not be effective because they don't patronize hospital for periodic medical checkups of blood pressure (Nwachukwu, 2005). WHO and the

International Society of Hypertension (ISH) (2013) stated that Some 600 million people worldwide have high blood pressure and nearly 3 million die every year as a direct result. Yet seven out of every 10 people with hypertension are not being treated adequately.

The relationship between BP and risk of CVD events is continuous, consistent, and independent of other risk factors. The higher the BP, the greater is the chance of heart attack, heart failure, stroke, and kidney disease. For individuals 40–70 years of age, each increment of 20 mmHg in systolic BP (SBP) or 10 mmHg in diastolic BP (DBP) doubles the risk of CVD across the entire BP range from 115/75 to 185/115 mmHg. (Lewington, Clarke & Qizilbash 2002). Panye & Halm (1998) stated that the result of lack of awareness about the existence of hypertension had led many people to suffer complications of degenerative disease such as stroke, kidney failure and heart attack. They added that many factors are associated with hypertension which include; age, sex, genetic, environmental factor, and stress. Genetic predisposition on hypertension have shown that there is 45percent likelihood of developing hypertension if both parents are hypertensive, 28percent chance of one parent is hypertension and a 30percent or greater if sibling is hypertensive. World Health Organization, (2013) in a global brief on Hypertension stated that the behavioural risk factors for the development of hypertension includes; Consumption of food containing too much salt and fat, and not eating enough fruit and vegetables, Harmful levels of alcohol use, Physical inactivity and lack of exercise, and Poor stress management. These behavioural risk factors are highly influenced by people's working and living conditions.

Another factor associated with hypertension is obesity. According to Dim and Ajuluchukwu (1996) obese people are more likely to have hypertension, and hypertensive that gain weight have a further rise in their blood pressure, increased blood pressure is also found to be associated with increased increase body mass index, which is associated with hyperlipaemia especially of total cholesterol and density lipoprotein. Constant stress example physical and mental stress with complete substitution and pre-various economic circumstance increase blood pressure. Wough & Grant (2010) stated that an abnormal elevation of systolic and or diastolic arterial pressure systolic level is generally related to emotional stress. This shows that there is a relationship between stress and hypertension.

However hypertension is common in our society today and its knowledge was inadequate, which affects the health of individuals and the community This study therefore was an attempt to assesses the knowledge and attitude towards hypertension among academic staffs in College of Education Azare, Bauchi State.

### **Objectives of the study**

The objectives of this study were to determine:

1. The level of awareness of hypertension amongst academic staffs in College of Education Azare, Bauchi State.
2. The attitude and practice towards hypertension amongst academic staffs in College of Education Azare, Bauchi State.

## **II. Methodology**

### **Research design**

The design adopted for this study was descriptive survey research. According to Njodi and Bwala (2010) a survey research gathered data at a particular point in time with the intention of describing the nature of existing conditions, or identifying standard against which existing conditions can be compared or determine the relationships that exist between specific event.

### **Research Questions**

This study aims at answering the following research question:

1. What is the level of awareness of academic staff of College of Education Azare, Bauchi State toward hypertension?
2. What is the attitude of academic staff toward hypertension in College of Education Azare, Bauchi State?

### **Population of the study**

The population used for this study comprises of all academic staff in College of Education Azare, Bauchi state. The total population was four hundred and forty four (444). The table below shows the distribution of the population.

**Table 1 :** Shows the distribution of the population of the study.

| S/No.                   | Name of School                               | No. of Academic Staff |
|-------------------------|--|-----------------------|
| 1                       | School of Education                          | 66                    |
| 2.                      | School of Early Child Care Education         | 20                    |
| 3                       | School of Art and Social Science             | 67                    |
| 4.                      | School of Languages                          | 49                    |
| 5.                      | School of Vocational and Technical Education | 68                    |
| 6.                      | Library                                      | 03                    |
| 7.                      | School of Educational Service                | 94                    |
| 8.                      | School of Science                            | 77                    |
| <b>Total Population</b> |  | <b>444</b>            |

Source: [www.coeazare.edu.ng](http://www.coeazare.edu.ng)

### Sample and Sampling Technique

The sample used in this study was two hundred and five (205). The sample size was chosen based on Krejcie and Morgan table of sample as contained in Kolo (1992).

The sampling technique adopted and used in this study was disproportional stratified random sampling technique, where each individual is given equal chance of been selected. Also the disproportional stratified random sampling technique was used because it allowed the researcher to select a sample from each school based on the population of the school. Kolo (1992) was of the opinion that disproportional stratified random sampling technique allows for picking sample based on the number in each stratum. That is to say that when there is high number of subject in the stratum, high number is picked as sample and vice versa. The table below shows the distribution of the sample for this study.

**Table 2:** Showing the Distribution of the Sample of the Study

| S/No.        | Name of school                               | Sample size |
|--------------|--|-------------|
| 1            | School of Education                          | 30          |
| 2.           | School of early child care education         | 08          |
| 2            | School of art and social science             | 31          |
| 3.           | School of languages                          | 23          |
| 4.           | School of vocational and technical Education | 32          |
| 5.           | Library                                      | 01          |
| 6.           | School of educational service                | 44          |
| 7.           | School of Science                            | 36          |
| <b>Total</b> |  | <b>205</b>  |

Source: Field work, 2015.

### Research Instrument

The research instrument used in this study was self structured questionnaire. The questionnaire was structured into three (3) sections. Section "A" consists of data on demographic characteristics of the respondents. Section "B" sought information on the respondent level of awareness on hypertension Section "C" sought information on the attitude towards hypertension among the respondent.

### Validity and Reliability of the instrument

The instrument was validated by expert in the field of education research in College of Education, Azare. This was done in order to make instrument measures what it was set measure.

The reliability of the instrument was determined by using test-retest method of reliability. The instrument was first used on fifty members of the population and after one week the same instrument was administered to the same people. The two results were correlated using Pearson Product Moment Correlation Coefficient and the result found was 0.7. This makes the instrument very reliable because it measured at different times what it was supposed to measure.

### Procedure for Data Collection

Data were elicited through the use of self structured questionnaire from the respondents. A total of two hundred and five (205) copies of questionnaire were administered with the help of two (2) trained research assistants. A minimum of one week was given to fill the questionnaire and were collected back immediately after dully filled by the respondents. The data collected from the instrument was a discrete one; therefore simple percentage was used in the analysis.

### III. Results

**Table 3 :** Demographic Information of the Respondents

| S/No. | Item   | Responses %         |
|-------|--|---------------------|
| 1     | Gender:<br>Male<br>Female  | 85<br>15            |
| 2.    | Age:<br>20 – 30 years<br>31 – 40 years<br>41 – 50 years<br>51 and above years                | 15<br>50<br>30<br>5 |
| 3.    | Education Qualification:<br>NCE/Diploma<br>B.Sc, or equivalent<br>M.Sc, or equivalent<br>PhD | 30<br>41<br>27<br>2 |
| 4.    | Marital Status:<br>Single<br>Married<br>Widowed  | 20<br>75<br>5       |

Source: Field Work, 2015

In table three above 85 percent of the respondents were males while others that were females were 15 percent. Also those that fall on the age between 20 – 30 years were 15 percent, those between 31 – 40 years were 50 percent, and another 30 percent of the respondents were within the age of 41 – 50 years, and those between 51 years and above were 5 percent. The Table also indicated the educational qualification of the respondents were 30 percent are NCE/Diploma holders, and 41 percent of the respondents were B.Sc. or its equivalent holders, while 27 percent of the respondents were M.Sc. or it equivalent holders. And 2 percent of the respondents were PhD holders. Furthermore 75 percent of the respondents were married, 20 percent of the respondents were single, and only 5 percent of the respondents were widowed.

**Table 4:** Level of awareness of Hypertension amongst the Respondents

| S/N | Items   | Responses |     |
|-----|---|-----------|-----|
|     |   | Yes %     | No% |
| 5   | Have you ever heard of hypertension?  | 88        | 12  |
| 6   | Do you know that hypertension can be treated?   | 75        | 25  |
| 7   | Do you know that hypertension can lead to heart attack which could eventually lead to death | 85        | 15  |
| 8   | Do you know that stroke occurs as a result of hypertension?                                 | 92        | 8   |
| 9   | Do you believe that hypertension can be hereditary?   | 47        | 53  |
| 10. | Do you believe that elderly people are prone to hypertension than the young adult?          | 63        | 37  |
| 11  | Do you know that too much salt or high fat in a diet can cause hypertension?                | 78        | 22  |
| 12  | Do you know that obesity or physical inactivity causes hypertension?                        | 72        | 28  |

Source: Field work, 2015

Result in Table 4 indicated that 80 percent of the respondents were agreed they have heard of hypertension and 75 percent of the respondents said hypertension could be treated; likewise 75 percent of the respondents agreed that hypertension can lead to heart attack which could eventually lead to death and 92 percent of the respondents were aware that stroke occurs as a result of hypertension complication. But 78 percent of the respondents were aware that too much salt or high fat in a diet can cause hypertension and 72 percent agree that obesity or physical activity causes hypertension. Also about 47 percent of the respondents believed that hypertension can be hereditary, while 63 percent of the respondent believed that elderly people are prone to hypertension than the young adult. This shows that there is a considerable high level of awareness on hypertension among the respondent.

**Table 5:** Attitude and Practice toward Hypertension amongst the Respondents

| S/N | Items   | Responses |     |
|-----|---|-----------|-----|
|     |   | Yes %     | No% |
| 13  | Do you checked your blood pressure regularly                          | 30        | 70  |
| 14  | Do you considered hypertension as a health problem?                   | 73        | 27  |
| 15  | Are you hypertensive and on hypertensive drugs?                       | 16        | 84  |
| 16  | Do you participate in any physical activity at least 30 minute a day? | 64        | 34  |
| 17  | Do you consume foods with too much salt or high fat in your diet?     | 19        | 81  |
| 18  | Do you smoke?   | 11        | 96  |
| 19  | Do you take alcohol?  | 5         | 95  |

|    |   |    |    |
|----|---|----|----|
| 20 | Do you take rest after long working hours?                  | 35 | 65 |
| 21 | Are you willing to check your blood pressure in the future? | 67 | 33 |

Source: Field work, 2015

Table 5 above shows that 70 percent of the respondent do not checked their blood pressure regularly and 73 percent of the respondents considered hypertension as a health problem, however about 16 percent of the respondent were hypertensive and on hypertensive drugs. Also 64 percent of the respondents do engage in physical activity at least 30 minute a day, and 81 percent of the respondents did not consume foods with too much salt or high fat in their diet. However 96 percent of the respondents do not smoke, and also 97 percent of them do not take alcohol. But only 35 percent take rest after long working hours and lastly majority of the respondent representing 67 percent were willing to check their blood pressure in the future despite being perceived as a serious health problem. This shows that there is a relatively negative attitude and practice toward hypertension among the respondent.

#### IV. Discussions Of Results

The study investigated the knowledge and attitude towards hypertension amongst academic staffs in college of education Azare and the result of the analysis of research question one showed that there is a considerable high level of awareness on hypertension among the respondents. Because most of the respondents have heard of hypertension and its health implications like stroke and heart attack which could eventually lead to death if not treated. Also they were of the view that sedentary life style such as high salt intake and physical inactivity can cause hypertension. And they believed that hypertension can be hereditary, and elderly people are prone to hypertension than the young adult. This can be attributed to their high level of literacy in the sense that they have access to hospital, media and books. This tallied with of the findings of Abdullah and Jegede, 2011) in a study among the academic staff in university of Ibadan Nigeria who found out that awareness and knowledge about hypertension complications was considerably high. However, Oliveria, Chen, McCarthy, et al, (2005) were of the view that it is possible for people to demonstrate an awareness of hypertension but not having a comprehensive understanding of the health its condition.

The result of the analysis of the research question two reveals that there is a relatively negative attitude and practice toward hypertension among the respondent due to majority of the respondent do not check their blood pressure regularly and most of the respondent were willing to check their blood pressure in the future despite their high level of awareness on hypertension although only few of them were confirmed hypertensive. It has been predicted that more than 1.5 billion people in 2025 would be hypertensive worldwide if drastic measures are not taken to control hypertension (Kearney, Whelton, Reynolds, & He, 2005). And most of them practice healthy life style and good dietary habit but they do not have enough time to rest after long working hours. Therefore there risk to developing hypertension was low. But their working condition can be influence their risk to hypertension as observed by World Health Organization, (2013) in a global brief on Hypertension that the behavioural risk factors for the development of hypertension includes; Consumption of food containing too much salt and fat, and not eating enough fruit and vegetables, Harmful levels of alcohol use, Physical inactivity and lack of exercise, and Poor stress management. These behavioural risk factors are highly influenced by people's working and living conditions.

#### V. Conclusion

It can be concluded that there is a considerable high level of awareness on hypertension among the academic staff of college of education Azare Bauchi state but majority of them develop a relatively poor attitude toward it.

#### Recommendations

- The study recommends that the college academic staff should be encouraged on the importance of regular blood pressure check-up so as to detect the condition in its early phase.
- Also in order to achieve a positive health behaviour, motivation and high level of productivity in the college environment the college management should organize a timely campaign on blood pressure awareness in the form of seminars and conferences for academic staff.
- The academic staff should have enough time for resting after long time of academic and other activities so as to release stress.

### References

- [1] Abdullahi, A.A. & Jegede, A. (2011). "Knowledge of hypertension among the staff of university of Ibadan. Nigeria". *Journal of public health and epidemiology*, 3(5), 204-209.
- [2] Chobanian, A. V. Bakris, G. L. & Black, H. R. (2003). "The seventh report of the joint national committee on prevention, detection, evaluation and treatment of high blood pressure". *Journal of American medical association*, 289(19), 1206–1233.
- [3] Dim, M. R. & AjuluChukwu, N. A. (1996). "Plasma lipid levels in Nigerian hypertensive: The gender factor". *Nigerian quarterly journal of hospital medicine*, 293 – 294.
- [4] Hsia, J., Margolis, K. L., & Eaton, C. B., et al. (2007). Prehypertension and cardiovascular disease risk in the women's health initiative. *Circulation*, 115(7), 855–860.
- [5] Kolo, A.I (1992). *Essential of research in education (A handbook for students and beginning researchers in education)*. Lagos: Text and Leisure Publishers.
- [6] Lewington, S. Clerk, R. & Qizilbash, N, eta al (2002). Age- specific relevance of usual blood pressure to vascular mortality: A meta-analysis of individual data for one million adults in prospective studies. *Lancet*; 360: 1903-13
- [7] Njodi, I. A. & Bwala D. W. (2010). *Skills and technique of reporting research outcomes in health education*. Ibadan: Loud Book Publishers.
- [8] Nwachukwu, J. (2005). How to battle hypertension, *Global Start*, 2 (17), 8.
- [9] Oliveria, S.A, Chen, R.S, McCarthy, B.D, Davis, C.C, & Hill, M.N (2005): Hypertension knowledge, awareness, and attitudes in a hypertensive population. *J. Gen. Int. Med.*, 20(3), 219-225.
- [10] Payne, W. A. & Halm, D. B. (1998). *Understanding your health* (5<sup>th</sup> Ed.). USA:WCB/McGraw – Hill Companies.
- [11] W.H.O (2013). *A global brief on hypertension world health day 2013*, WHO Press, World Health Organization, Geneva, Switzerland.
- [12] W.H.O/ISH (2003). World health organization /International society of hypertension statement on management of hypertension. *J. Hypertens.*, 21(11):1983-1992.
- [13] Williams, S. S. (2007). Advances in genetic hypertension. *Current Opinion in Pediatrics*, 19(2), 192–198.
- [14] Wikipedia (2010). Journal of American Medical Association (2010). Retrieved on August 2015 from [www.goggle.wikipedia.org](http://www.goggle.wikipedia.org).
- [15] Wough & Grant (2010): *Anatomy and physiology in health and illness*. Revised editions. London: Churchvill Elsevier publishers ltd.
- [16] [www.coeazare.edu.ng](http://www.coeazare.edu.ng)• Retrieved on 14<sup>th</sup> July, 2016.

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