



ABSTRACT

The study was conducted to ascertain the awareness level of hypertension among adults in Minna Metropolis, Niger state, Nigeria. Expo-factor research design was used for the study. The population for the study was 5073 while the sample size for the study was three hundred and sixty five (365) adults. Questionnaire was used to obtain data. The instrument was

AWARENESS LEVEL OF HYPERTENSION AMONG ADULTS IN NIGER STATE, NIGERIA

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Introduction

Hypertension has become a major universal health problem that has been identified as the most leading risk factor for cardiovascular morbidity and mortality in the world. It increases hardening of the arteries, thus predisposing individuals to heart diseases, peripheral vascular diseases, stroke, heart failure and kidney failure. Hypertension is one of the commonest non-communicable diseases in the world and all races are affected with variable prevalence. Research has shown that hypertension has caused a lot of damages to human life because it has produced disruptions in health, disability and death in the adult population worldwide (WHO, 2013).

Ejike, Ezeanyika and Ugwu (2010) stated that hypertension causes one in every eight deaths worldwide, making it the third leading killer disease in the world. In sub-Saharan Africa, it is the most rapidly rising cardiovascular disease and



affecting over 20 million people (Kadiri, 2005) . In Nigeria, hypertension has become the commonest non-communicable disease with over 4.3 million Nigerians above the age of fifteen years classified as being hypertensive (WHO, 2013). Studies have indicated that level of education is associated with awareness, which may include the risk factors and preventive measures of hypertension. According to Hamdan, Saeed, Kutbi, Choudhry and Nooh (2010) adults who were more aware adopted positive lifestyles, while

validated by five experts and the reliability index of 0.86 was determined using test-retest method. Frequency counts, simple percentages mean and t-test statistics were used for data analysis. The results of the study showed that: there was high level of awareness regarding the signs and symptoms of hypertension among adults; adults exhibited high level of knowledge regarding risk factors of hypertension and there was high level of knowledge regarding preventive measures of hypertension. Adults aged above 30 had high level of awareness of various dimensions of hypertension except that of signs and symptoms in which the level of knowledge was moderate level of knowledge according to age. Female adults' level of knowledge was high compared to that of their male counterpart. Adults with no formal education had moderate level of knowledge in the various dimensions of hypertension. There was significant difference in the level of awareness of hypertension among adults according to age, sex and level of education. Based on the findings of this study, it was concluded that adults had moderate level of awareness regarding the signs and symptoms of hypertension; they also had high level of awareness regarding the risk factors of hypertension and high level of awareness regarding the preventive measures of hypertension. Among other recommendations made were: Government and voluntary health agencies should sponsor intensive enlightenment campaign through print and electronic media in order to sustain the knowledge level of adults on hypertension and its complications

Keywords: Awareness, hypertension, Signs and Symptoms, Blood-pressure, Risk Factors, Preventive Measures



the illiterate adults adopted unhealthy lifestyles. The higher the educational attainment, the higher the acquisition of awareness, attitude and behaviour, while the lower the level of education, the lower the awareness in knowing risk factors and prevention measures of hypertension.

Risk factors are defined by Maxine, Naomi, Marshak and Wilson (2009) as individual characteristics which affect the person's chances of developing a particular disease or group of diseases within a defined future time period. Risk factor is anything that has been identified as increasing an individual's chances of getting a disease or developing a condition. They will be considered to be at risk of developing hypertension, those with habits or characteristics which increase the likelihood of developing hypertension. Risk factors in this study, refers to the characteristics, conditions or behaviours such as excess salt intake and smoking which increase the probability of hypertension to occur. When risk factors are related to hypertension, they are known as risk factors of hypertension. Risk factors of hypertension are of two types: those ones that can be changed and those that cannot be changed. The risk factors that can be changed are obesity, excess salt intake, smoking, environmental stress, oral contraceptives, sedentary lifestyle, elevated levels of plasma lipids and unregulated secretion of aldosterone. Risk factors that cannot be changed are genetic predisposition, age and gender. Adults should have adequate awareness of the risk factors to be able to prevent hypertension. Preventive measures are interventions directed to avert the emergence of specific disease, reducing their incidence and prevalence in population. Starfield, Hyde, and Gervas (2007) defined preventive measures as all measures that limit the progression of a disease at any stage of its course. In this study, preventive measures is referred to as all the activities whose primary purpose is to promote, restore and maintain health, and those practices which are directed towards preventing hypertension among adults. There are two types of preventive measures; primary and secondary. Primary prevention is the intervention that averts the occurrence of a disease or actions taken prior to the onset of disease which removes the possibility that a disease will occur. It signifies intervention in the pre-



pathogenesis phase of a disease or health problem. It may be accomplished by measures designed to promote general health and well-being, and quality of life of adults (health promotion) or by specific protective measures (specific protection). Secondary prevention is action which slows the progression of a disease at its incipient stage and prevents complication. Salama (2011) opined that the specific intervention in secondary prevention is early detection of hypertension which involves screening test. It attempts to arrest the disease process, restore health by seeking out unrecognized disease and treating it before irreversible pathological changes take place especially among adults. Adults who believe that certain lifestyles such as excess salt intake and inactivity can predispose them to hypertension will achieve good health by avoiding such lifestyles (WHO, 2018). Therefore, adults in Niger State need to have the awareness of hypertension to reduce the prevalence of hypertension disease, improve health and optimum well-being. But it is likely that adults in the area may or may not have adequate awareness of hypertension especially going by the number of thirty one (31) cases of hypertension in the state and its devastating consequences. Therefore, this study on awareness of hypertension becomes necessary. The researcher was motivated to investigate the level of awareness of hypertension possessed by adults in Minna metropolis of Niger State.

It is expected that adults should practice healthy lifestyles such as regular exercise, maintaining weight at 15 percent or less of desirable weight, management of stress, moderation of alcohol consumption, avoidance of tobacco smoking, increase intake of fruits and vegetables, increase intake of low-fat dairy products and reduction of excessive salt intake to prevent hypertension and improve optimum well-being. Adults should have basic awareness of these healthy lifestyle behaviours while growing up through health education to be able to prevent cardiovascular diseases such as hypertension.

The fact that hypertension as a medical problem has become a major source of sudden death among adults in Nigeria. It has therefore become a major concern for medical practitioners, researchers and counselling psychologists. Government and individuals have mounted radio programmes, workshops and other enlightenment activities on this



problem to minimize the effect in the society however; there is dearth of research study on this problem. Thus, the current research aims at investigating the level of awareness of adults on the signs and symptoms, risk factors and preventive measures of hypertension among adults in Minna, Niger State. The purpose of the study was to find out the level of awareness of hypertension among adults in Niger State. Specifically, the study was set to determine the level of awareness of:

1. Assess the awareness of signs and symptoms of hypertension possessed by adults in Minna metropolis of Niger State.
2. Examine the risk factors of hypertension possessed by adults in Minna Metropolis of Niger State.

Materials and Methods

The data collection was collected by the researcher with the support of two research assistants in all the areas. A letter of authority was obtained from the department to introduce the researcher to all the areas that would be visited. In each area the researcher took time to explain the purpose of the study and how the questionnaire would be answered and on how to respond to the items of the questionnaire. The questionnaires were collected back immediately.

The following scoring guidelines was used to score the responses of the participants based on a four point adapted likert-type scale: Strongly Agree responses represented four (4) points, Agree responses represented three (3) points, Disagree two (2) points and Strongly Disagree represented one (1) point. Responses of strongly agree and agree were merged together and disagree and strongly disagree were also be merged together and the decision rule was 2.50.

The sample size consisted of 365 subjects, who were from secondary schools, maternity centre of the primary health care and local government secretariat workers. A multistage sampling technique was adopted in chosen the sample.

Firstly, schools, maternity centres, and local government areas were selected using simple random sampling techniques. Thus four (4) secondary schools, two (2) maternity centres and two local government council were randomly selected from the twenty two (22) secondary



schools, Ten (10) maternity centres and two (2) local government areas in Minna Metropolis.

Secondly in the two secondary schools, there were two hundred and sixty seven teachers, in the two maternity centre, there are 525 clients and in the local government there were 998 and 1585 in both local government. Proportionate sampling techniques was used in selecting 34 respondents from each secondary school, 30 clients from the maternity setting and 85 staff were selected from local government council.

The demographic data collected were analyzed using frequency count and percentage. Frequency count, percentage and mean were used to answer the research questions while t-test was used to test the hypotheses formulated.

Results and Discussion

Result of Table 1 showed the distribution of the respondents based on the age and gender. From the result 54.79% of the respondents were in age between 21 to 30, while 45.21% were aged above 30 years. The result showed that the majority of the respondents were females with a total of 196.

Table 1: Distribution of Respondent Based On Age

AGE RANGE	SEX		Frequency	Percentage
	MALE	FEMALE		
21 – 30	94	106	200	54.79%
31 and above	76	89	165	45.21%
TOTAL	170	196	365	100%

From the result of the descriptive statistics in Table 2, it can be observed that the respondents are aware of the signs and symptoms of hypertension in Table 4.4 above because all the mean scores for all items were above decision rule of 2.50 mean score apart from item 8 with mean score of 1.25 which is less than 2.50.

Table 2: Showing descriptive statistics of the responses of respondents on Signs and Symptoms of Hypertension



S/N	Items on Signs and Symptoms of Hypertension	Yes	No	Total	Mean (x)
1	Headache, dizziness, general tiredness	295 (80.82%)	70 (19.17%)	365 (100%)	3.44
2	Restlessness/ palpitation	280 (76.71%)	85 (23.29%)	365 (100%)	3.32
3	Excess gain of weight	279 (76.44%)	86 (23.56%)	365 (100%)	3.30
4	internal heat	260 (71.23%)	105 (28%)	365 (100%)	3.23
5	Symptomless	300 (82.19%)	65 (17.81%)	365 (100%)	3.48
6	Tense feeling in the chest (cannot breathe)	338 (92.60%)	27 (7.40%)	365 (100%)	3.59
7	Vision problem	250 (68.49%)	115 (31.51%)	365 (100%)	3.09
8	I do not know	86 (23.56%)	279 (76.43%)	365 (100%)	1.25

From the result of the descriptive statistics in Table 3, it can be observed that the respondents were aware of the risk factors of hypertension in Table above because the mean scores for all items were above the decision rule of 2.50 mean score.

Table 3: Showing descriptive statistics of the responses of respondents on risk factors of Hypertension

S/N	Items on Factors That can cause High Blood Pressure	Yes	No	Total	Mean (x)
1	Excess weight gain	267 (73.15%)	98 (26.85%)	365 (100%)	3.11
2	Excessive alcohol consumption	320 (87.67%)	45 (12.33%)	365 (100%)	3.48
3	Smoking	350 (95.89%)	15 (4.11%)	365 (100%)	3.88
4	Excessive salt intake	230 (63.02%)	135 (36.98%)	365 (100%)	3.00
5	Sedentary lifestyle	250 (68.49%)	115 (31.51%)	365 (100%)	3.09



Objective one findings implies that the awareness of signs and symptoms of hypertension among adults is high; this agreed with the findings of Ali and Jimoh (2011) that adults have high level of awareness of signs and symptoms of hypertension. This is because under normal circumstance, adults are expected to demonstrate in-depth knowledge and awareness of hypertension. Adults generally are aware of the signs and symptoms of hypertension. The result from the table also showed a positive response from each of the participant as the factors that led to the awareness level of signs and symptoms of hypertension among adults were rated very high. This finding is in consonance with the findings of Mlunde (2007) and Iyalomhe (2010) who reported that their respondents exhibited high level of knowledge in the dimensions of hypertension. Similarly, Ali and Jimoh (2011) reported in their study that some members of staff demonstrated a relatively high level of awareness about the complications associated with hypertension but knowledge about the risk factors of hypertension and attitude towards the illness was still low. Therefore, majority of the respondents were aware of most signs and symptoms of hypertension in minna metropolis of Niger State.

Objective two findings imply that the level of awareness of risk factors of hypertension possessed by adults in Minna Metropolis was high. This is in line with the work of Reddy and Prabu (2005) who reported that many adults were aware of the causes of hypertension. Similarly, Zhang, Minmin, Hassan, Jian, Shengchun, Tao and Xing (2008) that most people showed knowledge of risk factors of hypertension and awareness of being hypertensive. However, it was observed in this study that most of the respondents were aware of the risk factors associated with hypertension.

Conclusions

Based on the findings of this study, it was concluded that adults had moderate level of awareness regarding the signs and symptoms of hypertension; they also had high level of awareness regarding the risk factors of hypertension and high level of awareness regarding the preventive measures of hypertension. Female adults' awareness of knowledge was high for sign and symptoms and also the risk factors and



preventive measures while that of males were moderate for the same dimensions. Both male and female adult level of awareness for signs and symptoms was moderate.

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