

Full Length Research Paper

# Knowledge, attitude to hypertension and lifestyle habits of rural dwellers in Owerre-Nkwoji, Imo State Nigeria

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Accepted 5 December, 2013

Hypertension accounts for 13% of global mortality, with 25% prevalence in Nigeria. Current trends in management is lifestyle modification. Information on lifestyle habits is needed for effective intervention programe. A study was done among rural dwellers between ages 20 and 75 in Owerre- Nkwoji, Imo State, to determine their knowledge, attitude to hypertension and lifestyle habits. Information gathered would be used to plan an intervention programe to increase awareness and promote healthy lifestyles. The study design is descriptive and simple random sampling method was used in selection of village for the study. An instrument used was a questionnaire with sections on background, knowledge, attitude and lifestyle habits. Descriptive and inferential analysis was done. Findings revealed awareness on hypertension as 116 (96.7%). 88 (73%) were aware of sudden death and stroke in the community. Participants with high knowledge were 32 (26.7%), average 40 (33.3%) and low 48 (40.0%). There was positive attitude to hypertension prevention. Sixty-four (53.3%) believed that hypertension can be sent by one's enemy. Unhealthy lifestyles elicited include use of alcohol, table salt and stimulants. There is a need to correct misconceptions. Readiness for improved health was elicited. As people recognize that lifestyles and behavior significantly affect health, they may assume responsibility for avoiding high risk behaviors.

**Key words:** Attitude, hypertension, knowledge, lifestyle habits, rural-dwellers.

## INTRODUCTION

Hypertension is recorded as a major type of cardiovascular disease which affects one billion people worldwide and claims the life of seven million (American Heart Association, 2006). It accounts for 13% of global mortality (Katib, 2004) with 25% prevalence in Nigeria (Danbauchi, 2007). A current trend in management is lifestyle modification (Simeon and Zieve, 2008). This study serves as a pilot study for a larger study in the same environment. Information on lifestyle habits is needed for effective intervention for health promotion programes. The participants' knowledge, attitude to hypertension and its preventive measure, lifestyle habits in relation to hypertension as well as blood pressure screening were assessed for this purpose.

## MATERIALS AND METHODS

Study was descriptive, done among rural dwellers between ages 20 and 75 in Owerre-Nkwoji, Imo State. The study population was 120 rural dwellers (44 males and 76 females aged between 20 and 75 years). A village was randomly selected out of the six that made up the town through balloting. Informed consent was obtained from the town union leader as well as from each participant. The first household was identified with tossing of the coin at the center of the village square. Elements of the study were drawn from alternate households until the required number was reached. Instrument for data collection were: a structured questionnaire which has four sections that is, demography, knowledge, attitude and lifestyle habits. Measuring tools for blood pressure, weight and height were standardized. Face and content validity was ascertained by experts. Back to back translation was done using 10 respondents from the community to ensure congruence. The measuring tools were tested

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**Table 1.** Frequencies and percentage of responses on knowledge of hypertension.

Awareness and knowledge variables	Statement	Responses		
		Yes (%)	No (%)	Do not know (%)
Awareness	Is your BP reading known to you?	24 (20)	72 (60)	24 (20)
Cause	Much thinking (worries) is the main cause of HBP	104 (86.7)	4 (3.3)	12 (10)
	Diagnosis of HBP is made by any health worker	20 (16.7)	100 (83.3)	0 (0.0)
Diagnosis of HBP	HBP is detected on sight	28 (23.3)	20 (16.7)	52 (43.0)
	HBP is detected by blood pressure measurement	92 (76.7)	28 (23.7)	0 (0.0)
Symptoms	Severe headache with heat sensation is a symptom of HBP	56 (46.7)	12 (10)	52 (43.3)
	Symptom of HBP include pain side of neck	36 (30.0)	28 (23.3)	56 (46.7)
Risk factors	Alcohol can bring about HBP	44 (36.6)	36 (30.0)	40 (33.3)
	Use of table salt can bring about HBP	8 (6.7)	84 (70.0)	28 (23.3)
	Obesity can bring about HBP	36 (30.0)	32 (26.7)	52 (43.3)
Management of HBP	HBP is best managed in Prayer Houses	36 (20.0)	48 (40.0)	36 (30.0)
Prevention	Regular exercise can prevent HBP	76 (63.3)	8 (6.7)	36 (30.0)

for validity and reliability before putting them into use. Blood pressure, weight and height measurements were recorded with appropriate tools. All questionnaires were retrieved as it was interview administered, through training research assistants. Data when validated was found to be congruent. Analysis of Cronbach's alpha for English 1, Vernacular (Igbo) and English 2 was 0.63. Reliability of tool using Cronbach's coefficient was computed and value was 0.76. Data was entered using statistical package for social sciences 17.0. Descriptive analysis was done which displayed the frequencies of various variables; the mean values as well as the standard deviation (SD). Body mass index (BMI) and blood pressure classification was done. Inferential analysis of association between dependent and predisposing variables were computed using Chi square.

**RESULTS**

Age ranged from 20 to 75 (mean 36, SD ± 12.83).

Sixteen (13%) had no formal education; 20 (17%) primary; 48 (40%) secondary and 36 (30%) had tertiary education. Seventy six (63%) were jobless; 24 (20%) civil servants; 12 (10%) farmers; 8 (7%) are petty traders. Household income; lower class was 68 (57%), lower middle class was 48 (40%), and middle class was only 4 (3%). None were upper class. The overall awareness level was 44%. Findings revealed that 116 (96.7%) were aware that the term "hypertension" refers to high blood pressure. Twenty four (20%) were aware of their blood pressure readings while 96 (80%) are unaware. Responses on awareness of incidents of stroke and sudden deaths in the community was 88 (73.3%) each. Overall knowledge was 60%. Knowledge were 32 (26.7%), average 40 (33.3%) and low 48 (40.0%). Knowledge of

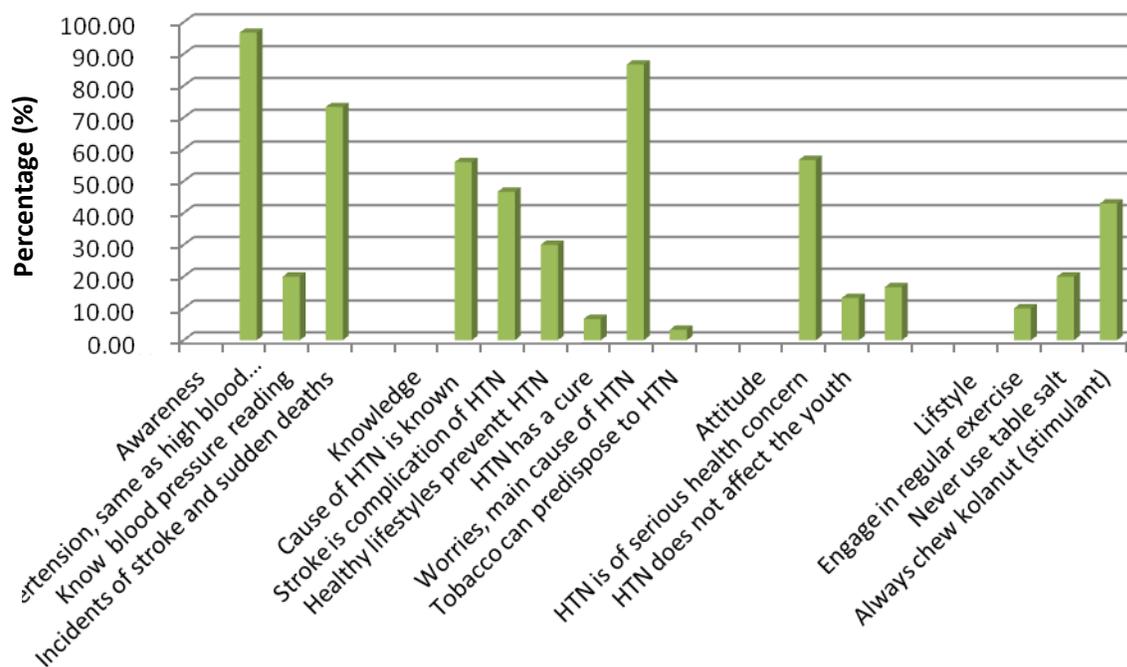
stroke as a complication of hypertension: Yes; 36 (30.0%); No 8 (6.7%) while 'do not know' was 76 (63.3%).

There was a positive attitude to hypertension prevention. Sixty eight (56.7%) strongly agreed and 52 (43.3%) agreed that hypertension is of serious health concern. Twenty (16.7%) strongly agreed and 52 (43.3%) agreed that it is important to check one's blood pressure regularly even though 16 (13.3%) strongly agreed and 36 (30.0%) agreed that hypertension is not for young people. There were myths about hypertension (Tables 1 and 2).

Unhealthy lifestyles elicited include use of alcohol, table salt and stimulants (Figure 1). The relationship between age and knowledge was not significant; Pearson X<sup>2</sup> = 0.563, P-value = 1.151,

**Table 2.** Myths expressed by respondents about hypertension.

Statement	Responses		
	Yes (%)	No (%)	Do not know (%)
HBP is sent through juju/remote enemy attack	80 (66.7)	36 (30.3)	4 (3.3)
HBP can be from food poisoning	56 (46.7)	36 (30.0)	28 (23.3)
Stroke is due to knock on the head by spirits	52 (44)	40 (33)	28 (23)

**Figure 1.** Responses on awareness, knowledge, attitude and lifestyle habits. Note: HTN is hypertension.

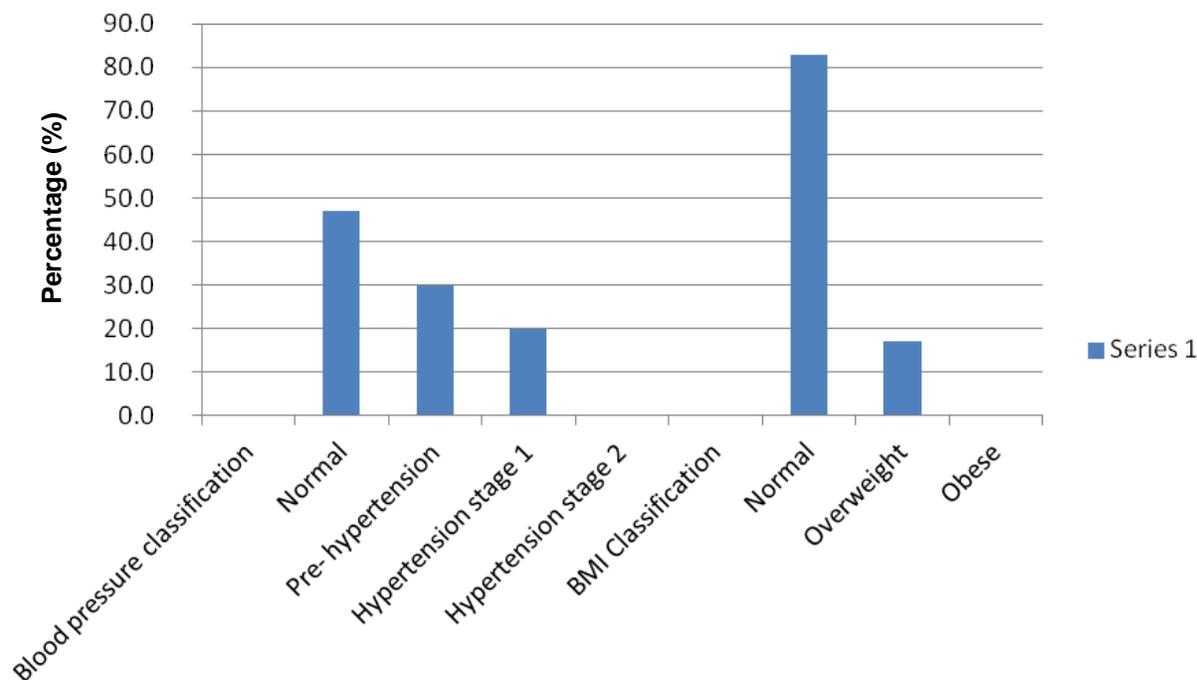
df = 2, even though high knowledge for ages 40 and above were 37.5% while less than 40 was 22.7%.

The relationship between sex and knowledge was not significant; Pearson  $X^2 = 0.237$ , P-value 2.880, df = 2 though there was high knowledge for males - 68.0% and females 32.0%. The relationship between age and attitude was not significant; Pearson  $X^2 = 0.697$ , P-value = 0.151, df = 1, even though result showed negative attitude for ages 40 and above as 37.5% and less than 40 as 45.5%. Relationship between sex and attitude, Pearson  $X^2 = 0.249$ , P-value = 1.330, df = 1 was also not significant, but negative attitude for males was 20.0% and females 48.0%. The relationship between age and lifestyles was not significant; Pearson  $X^2 = 0.657$ , P-value = 0.197, df = 1 though negative lifestyle for ages 40 and above as 50.0% and less than 40 was 40.0%. The relationship between sex and lifestyles was also insignificant; Pearson  $X^2 = 0.410$ , P-value = 0.679, df = 1 though result of negative lifestyle for males was 60.0% while females were 40.0%. Result of blood pressure revealed that fifty six (47%) had a normal blood pressure

reading. BMI showed participants were not obese (Figure 2).

## DISCUSSION

Awareness of participants on hypertension issues was 44% as against the 50% in the study by Ike et al. (2010). Misconception was also apparent in this study as in theirs. For example, stroke and hypertension can be caused by gods or enemy, respectively. Attitude to hypertension was negative especially among participants, as majority strongly disagreed with having hypertension in their lifetime and does not affect young people. Apparently these participants will not go for a routine blood pressure check based on their belief. It was also noted that majority of the participants could not differentiate between daily activities and regular exercise as it was strongly agreed that daily activities was same as regular exercises unlike in the study by Ohata et al. (2005) where all participants appreciated a 12 week



**Figure 2.** Classification of respondents' blood pressure and BMI status.

regular exercise as an intervention. Identified risk factors were in line with Wang et al. (2006) and Omorogiwa et al. (2009) in their studies. Smoking was not identified as a risk factor as in the report by Ricks (2004) and Aghaji (2008) but snuff was enlisted. The unhealthy lifestyles in relation to nutrition include the chewing of kolanut, use of table salt, and alcohol as in the studies by the aforementioned researchers.

## Conclusion

promote healthy lifestyles.

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Even though majority was aware that the term 'hypertension' refers to high blood pressure, the overall level of awareness was poor. Majority agreed that hypertension is a serious ailment and that adoption of healthy lifestyles will curb the menace, which implies that there would be health seeking behavior among the population. Myths about hypertension need urgent intervention. The findings of this study cannot be generalized because of the population size. There is therefore need for population focus study. Information gathered would be used to plan an intervention programme to increase awareness and