Hypertension in a Rural Community in South-South Nigeria

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ABSTRACT
Hypertension is a major cause of cardiovascular mortality and morbidity in both urban and rural areas. This cross-sectional study was done in Adim, a rural village in Nigeria, to determine the prevalence of hypertension. All participants for the study were aged 20 - 65 years. Pretested structured questionnaires were administered to assess and obtain demographic data. Blood pressure and anthropometric indices were measured from participants. A total of 824 participants enrolled for the study. About 500 (60.2%) were females and 324 (39.8%) were males. A total of 164 had hypertension (systolic blood pressure ≥ 140 mmHg and diastolic blood pressure ≥ 90 mmHg); 124 were females (73.67%) while 40 (24.4%) were males. Only 5 (3.1%) were aware of being hypertensive. The prevalence of hypertension was 19.9%. Hence, hypertension screening should be enhanced to allow for quicker diagnosis and intervention.


Hypertension is a major risk factor for heart failure, stroke, chronic kidney disease, and ischaemic heart disease in Africa.¹ In Nigeria, its prevalence has increased significantly over the past two to three decades.¹ Hypertension has been a disease of the affluent but this has changed in the last few years because of varying lifestyles.¹ The awareness of hypertension ranges from 44% in Western Europe to 28% in North America.¹ In Nigeria, hypertension awareness ranges from 3.5% in Sokoto to 30% in Nsukka.¹ The objective of this study was to assess the prevalence of hypertension in a rural village in Southern Nigeria. Adim is a semi-rural area in Cross River State, Nigeria with population of about 11,000 people, only a single health centre to cater for all the health needs of the populace.

Participants were recruited by random selection of people aged 20 - 65 years. Permission was sought from the Cross River State Ministry of Health and approval was given to carry out a medical outreach study. Informed consent was sought from all participants and the procedures were well explained to each of them, verbal informed consent was followed by the questionnaire administration. A pre-tested, structured questionnaire was used with parameters as age, gender, religion, marital status, occupation, alcohol and smoking history. Anthropometric data were taken regarding weight and height. Blood pressure was taken after ten minutes of sitting and resting, using appropriate cuff sizes on the left upper arm by an aneroid sphygmomanometer. Systolic blood pressure (SBP) and diastolic blood pressure (DBP) were the first and the fifth korotkoff sounds heard, respectively. Each participant had blood pressure taken twice. Height was measured by a weighing scale (Accosons, USA). Pregnant women were excluded from this study since the aetiology of pregnancy – induced hypertension – is different. A total of 824 participants consented and enrolled for this study. Those who had controlled blood pressure were known hypertensives with blood pressure < 140 mmHg systolic and < 90 mmHg diastolic. Data analysis was done by using EPI Info version 11.0.

In all, about 60.67% (500) were females and 39.32% (324) were males. Of all the 824 participants, 164 subjects had elevated blood pressure (SBP > 140 mmg, DBP > 90 mmHg). This amounted to 19.9% of the people screened. Of all the hypertensives, 124 (75.6%) were females and 40 were males (24.4%). Of all the hypertensive, about 61 people were less than 40 years (37.2%) while 103 people were older than 40 years.
(62.8%). Of all the hypertensives, only 5 knew that they were hypertensive (3.04%) and were on medications. The rest of them 159 (96.9%) were not aware of their high blood pressure.

At one time, hypertension was thought to be rare among Africans; however, many studies have proved this to be wrong. This scourge also includes both urban and rural Nigerian areas. Many studies done in Nigeria to ascertain prevalence of hypertension over the years have focused attention at the North and South Western Nigeria.2,3

In this study, the prevalence of hypertension was 19.9%, which is consistent with some other researchers.2,4

Urbanization has been linked as a major risk factor for increased blood pressure prevalence among rural dwellers in Pakistan.5 Similar opinions have been made by researchers from Kenya, who attributed increased prevalence of blood pressure among rural dwellers to both urbanization and diet. Aziz et al. determined the level of awareness of blood pressure in lower middle class in Pakistan. Giday et al. found that hypertension had equal public health importance in urban and rural settings of southern Ethiopia. They found hypertension to be common among those aged over 30 years.6

In conclusion, the prevalence of hypertension in this community was high. Many Nigerians live in the rural setting, hence aggressive and adequate steps must be taken to combat this scourge as hypertension is a great risk factor for cardiovascular diseases.

REFERENCES


