

Letters to the Editor

Percentage and profile of hypertensives among people aged 20 to 40 years attending a medical clinic in Pudimoe

To the editor: The increase in hypertensive patients in black South Africans has partly been attributed to urbanization and informal settlement.¹ Recently one study has found an association between low birth weight and fetal growth retardation with the risk of elevated blood pressure and hypertension in adulthood, with particular reference to Africa.^{2,3}

Hypertension as a risk factor for cardiovascular diseases need proper treatment and control to lessen conditions like stroke, heart attacks and renal failure, thereby improving the quality of life of patients and population at large. Many studies done on hypertension focused on the age group 35 years and older.^{4,5} The studies also found that blood pressure rises with age in all urban racial groups.⁶

The recent trend in hypertension indicates that black patients present at an earlier age of 20 years to 30 years rather than 30 years and older and the hypertension is more severe.⁷

The aim of this study was to determine the prevalence and profile of hypertensive people, aged 20 to 40 years attending a medical clinic in Pudimoe.

This is a descriptive study performed on patients aged 20 years to 40 years, attending a medical clinic in Pudimoe, Taung District, North West Province in South Africa. A total of 215 consecutive patients were screened for hypertension. The blood pressure measurement was taken sitting first. After the patient rested for 5 to 10 minutes the blood pressure was measured lying. The standard blood pressure cuff of 35cm width and a calibrated mercury sphygmomanometer was used.

Table I: Prevalence of hypertension by age group and gender.

	Sitting	Known Hypertensive	Lying	Known Hypertensive
Male: 20-30 years	1(6.7%) n=15	0	2(13.3%) n=15	0
Male: 31-40 years	8(25.0%) n=32	3(37.5%) n=8	9(28.1%) n=32	3(33.3%) n=9
Female: 20-30 years	8(8.3%) n=96	3(37.5%) n=8	17(17.7%) n=96	6(35.3%) n=17
Female: 31-40 years	11(15.9%) n=69	6(54.5%) n=11	11(15.9%) n=69	6(54.5%) n=11

In this study the blood pressure rises with age, which is consistent with the finding of other literature. Literature on hypertension started from age 35 years upwards and could not properly be compared with this study. The finding is that there is hypertensive in the age group 20 years to 40 years old and we need to be aware of that. Failure to detect hypertension early may be due to social and economic reasons, but hypertension is a major risk factor to heart diseases. It is a silent killer, therefore it needs to be measured and treated appropriately.

Ntsompe TJ, MBChB, MFamMed
Hiemstra LA, MBChB, MPraxMed
Department of Family Medicine, UFS.
Van Rooyen FC, MCom
G Joubert, BA, MSc
Department of Biostatistics, University of the Free State
Email: gnbsfcvr.md@mail.uovs.ac.za

A questionnaire was used to obtain demographic and medical information. The receptionists explained the questionnaire to the patients and the first author took the blood pressure during consultation. Written consent was obtained. All communication was in Setswana. A blood pressure above 140/90 was taken as abnormal, using the World Health Organization cut off point for hypertension. The study was approved by the Ethics committee of the Faculty of Health Sciences of the University of the Free State.

The median age of participants was 30 years. There were 48 (22.3%) men and 167 (77.7%) women in the study. More than half (58.1%) was unmarried and 45.8% was unemployed. Only 9.8% of the participants smoked and 18.6% uses alcohol.

According to the sitting measurements 28 (13.1%; 95% CI: 9.2%-18.2%) and according to the lying measurements 39 (18.1%; 95% CI: 13.6%-28.8%) were hypertensive. Only 24 (11.2%; 95% CI: 7.6%-16.1%) were hypertensive using both measurements. Of the patients who participated 18 (8.4%) were known or diagnosed as hypertensive.

Age was also categorized into two groups, twenty to thirty years and thirty one to forty years. In the younger age group 9 (8.1%) were hypertensive sitting. In the older age group 19 (18.8%) were hypertensive sitting. For the lying measurements the results for the younger group was 19 (17.1%) and for the older group 20 (19.8%). In the younger age group, 20 to 30 years, only 9 (4.2%) were hypertensive on both measurement, where in the older group, 31 to 40 years, 15 (6.9%) were hypertensive on both measurements.

Table I displays the results for males and females whose blood pressure measurements indicated that they are hypertensive, per age group.

References

- Seedat YK, Mayet FG. Risk factors leading to coronary heart disease among the black, Indian and white peoples of Durban. *J Hum Hypertens*. 1996;10(Suppl3):S93-4.
- Edwards D. Life events and hypertension – a negative finding. *S Afr Med J*. 1995;85(12Pt2):1346-8.
- Woelk GB. Is low birth weight a risk factor for adult hypertension? A literature review with particular reference to Africa. *S Afr Med J*. 1995;85(12Pt2):1348-9,1352-3.
- Van Rooyen JM, Kruger HS, Huisman HW, et al. An epidemiological study of hypertension and its determinants in a population in transition: the THUSA study. *J Hum Hypertens*. 2000;14(12):779-87.
- Seedat YK. Hypertension in black South Africans. *J Hum Hypertens*. 1999;13(2):96-103.
- Seedat YK. Is the pathogenesis of hypertension different in black patients? *J Hum Hypertens*. 1996;10Suppl3:S35-7.
- Milne FJ. Hypertension clinical guideline. *S Afr Med J*. 2001;91(2Pt2):161-172.