COMMENTARY: CARDIOVASCULAR DISEASE IN SUB-SAHARAN AFRICA: AN EMERGING PROBLEM

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Developing countries are witnessing a decline in the incidence of infectious diseases and a rise in the toll taken by cardiovascular diseases, including stroke and myocardial infarction.[1]

Hypertension remains the most important cardiovascular (CV) risk factor in Africa. As mentioned by Opie and Seedat, urbanization and adopting Western lifestyles contribute greatly in the rising incidence of hypertension in sub-Saharan Africa.[2] In Nigeria, the most populous Black nation in the world, about 20%–25% of adults have hypertension if a qualifying blood pressure level of 140/90 mm Hg is applied to 1991 non-communicable disease survey data.[3] Additionally, many adults in this part of the world may be more at risk for CV diseases as they have suffered stressful intrauterine environments due to poor antenatal care, malnutrition and anemia.[4] Behavioral changes, which are sequel to the poor socioeconomic status of most people, lead to frustrations often expressed as lack of exercise, increased smoking and alcohol consumption, as well as recreational drug use.

Cardiomyopathies and rheumatic heart diseases are still common medical conditions. In our center they ranked second and third causes of cardiovascular morbidity, respectively, after hypertensive heart disease.[5] Peripartum cardiac failure is still seen. This syndrome of unsettled etiology was said to have highest incidence in Zaria - northern Nigeria[6] and has been postulated to be related to an environment exposure – that of traditional hot baths undertaken by women after delivery. While rheumatic fever is on the decline, we are burdened with a large number of chronic rheumatic heart disease cases with chronic congestive heart failure and recurrent thrombo-embolic phenomena, both posing greater challenges of management.

Sub-Saharan Africa is said to be the home of two-thirds of HIV/AIDS patients. Apart from the issues of pericardial disease, tuberculosis and large vessel aneurysms in these patients, we should remember that the highly active antiretroviral therapy (HAART) shown to prolonged many patients' lives, can increase cardiac morbidity and the cardiac sequelae of HIV/AIDS may progress despite HAART.[7] HAART is implicated as a cause of lipodystrophy/lipoatrophy, dyslipidemia and insulin resistance that may be associated with an increase in the incidence of cardiovascular disease.[8] With this treatment becoming more available in Africa, cardiotoxicity including myocardial infarction are expected to be seen in these patients.

Ischemic heart disease and stroke have all been documented by various researchers to be on the increase in our population.[9,10] They continue to be important causes of morbidity and mortality.

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Individual, as well as collective efforts, as healthcare providers must be made to fight this growing CVD epidemic. In addition, African leaders and policy makers (including government) should have an unwavering commitment toward this course.

REFERENCES

1. Forrester T, Cooper RS, Weatherall D. Emergence of western diseases in the tropical world: the experience with chronic cardiovascular diseases. *Br Med Bull*. 1998;54(2):463–473.
2. Opie LH, Seedat YK. Hypertension in sub-Saharan African populations. *Circulation*. 2005;112:3554–3561.
3. Akinkugbe OO. *Non-Communicable Diseases (NCD) in Nigeria – Final Report of a National Survey*. Federal Ministry of Health – National Expert Committee on Non-Communicable Diseases. 1997;1–12.
4. Barker DJ. The fetal and infant origins of adult disease. *BMJ*. 1990;301(6761):1111.
5. Sani MU, Karaye KM, Ibrahim DA. Cardiac morbidity in subjects referred for echocardiographic assessment at a tertiary medical institution in the Nigerian Savanna zone. *Afr J Med Med Sci*. In press.
6. Danbauchi SS. Echocardiographic features of peripartum cardiac failure: the Zaria syndrome. *Trop Doct*. 2002;32:24–27.
7. Sani MU, Okeahialam BN, Aliyu SH, Enoch DA. Human Immunodeficiency Virus (HIV) related heart disease: A review. *Wien Klin Wochenschr*. 2005;117:73–81.
8. Barbaro G, Di Lorenzo G, Cirelli A, Grisorio B, Lucchini A, Hazra C. An open-label, prospective, observational study of the incidence of coronary artery disease in patients with HIV infection receiving highly active antiretroviral therapy. *Clin Ther*. 2003;25:2405–18.
9. Falase AO, Cole TO, Osuntokun BO. Myocardial infarction in Nigerians. *Trop Geogr Med*. 1974;25(2):147–150.
10. Osuntokun BO, Bademosi O, Akinkugbe OO, Oyediran AB, Carlisle R. Incidence of stroke in an African city: results from the stroke registry at Ibadan, Nigeria, 1973–1975. *Stroke*. 1979;10(2):205–207.