Review of Hypertension in Sub-Saharan Africa: A Comment From the Seychelles

To the Editor:

Addo et al1 recently reviewed the situation of hypertension in Sub-Saharan Africa. We would like to add some information from the Republic of Seychelles, a middle-income island state located 1800 km east of Kenya in which >80% of the population is of African descent.

The age- and sex-specific prevalence of high blood pressure (BP) has been assessed in 3 independent population-based surveys in 1989, 1994, and 2004.2–4 In 2004, the age-standardized prevalence of hypertension (BP ≥140/90 mm Hg or under treatment) was 44% in men and 36% in women.4 Among hypertensive persons, 55% of men and 75% of women were aware of having hypertension, 49% of men and 72% of women were treated, and 12% of men and 30% of women had BP controlled (BP <140/90 mm Hg). Prevalence of high BP, but also awareness and control, were therefore higher in Seychelles than in most populations reviewed by Addo et al.1 There is, however, a secular decline in the age-standardized prevalence of high BP,4 and vital statistics indicate a consequential decline in stroke mortality during the past 15 years.

The high prevalence of high BP and the low level of BP control in Seychelles have occurred despite a favorable situation. The population is well aware of hypertension,3 likely a result of sustained awareness campaigns since the late 1980s. Other studies in Seychelles have shown fairly low salt intake (6 g per day), reflecting a diet based largely on fish and unsalted rice. Health care is provided at no direct cost through an easily accessible network of health centers, and ≥1 medication from all of the antihypertensive classes is available. However, we found that only 26% of newly identified hypertensive persons maintained satisfactory drug compliance over a 12-month period.5 This clearly limits the effectiveness of hypertension treatment in the general population. A further problem of the screen-and-treat strategy is the poor BP control among those treated (often with 2 or 3 antihypertensive drugs).4

These findings do not dismiss the importance of providing appropriate medication to high-risk individuals but further emphasize the critical need for public health measures that impact on the determinants of BP in the entire population. A population approach is further supported by the low proportion of the general population at low risk for cardiovascular disease, ~20% at age 45 to 64 years in Seychelles.6 This situation may not be unique in Sub-Saharan Africa, because a high prevalence of cardiovascular risk factors is increasingly reported in the continent.

Many authors have called for better data on cardiovascular disease in Africa and stressed the need to address high BP through population-based interventions. The experience in the Seychelles over the past 15 years shows, indeed, the crucial role of an information system to identify and size up a problem and then monitor and evaluate the clinical and public health response to this problem.

Sources of Funding

The surveys benefited from support from the Ministry of Health of the Republic of Seychelles (all three years); Seychelles Marketing Board and some other local parastatal companies (1994, 2004); Swiss cantonal and federal authorities (1989); Swiss National Foundation for Science (1994, 2004); several departments of the University of Lausanne, Switzerland (1989, 1994, 2004); Canton Institute for Clinical Chemistry, St. Gallen Switzerland (1994, 2004); and the World Health Organization (2004).

Disclosures

None.

Pascal Bovet
Ministry of Health and Social Development Victoria, Republic of Seychelles
Institute of Social and Preventive Medicine University of Lausanne Lausanne, Switzerland

Conrad Shamlaye
Anne Gabriel
Ministry of Health and Social Development Victoria, Republic of Seychelles

Fred Paccaud
Institute of Social and Preventive Medicine University of Lausanne Lausanne, Switzerland

Review of Hypertension in Sub-Saharan Africa: A Comment From the Seychelles
Pascal Bovet, Conrad Shamlaye, Anne Gabriel and Fred Paccaud

Hypertension. 2008;51:e24; originally published online March 10, 2008;
doi: 10.1161/HYPERTENSIONAHA.107.109165

Hypertension is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
Copyright © 2008 American Heart Association, Inc. All rights reserved.
Print ISSN: 0194-911X. Online ISSN: 1524-4563

The online version of this article, along with updated information and services, is located on the
World Wide Web at:
http://hyper.ahajournals.org/content/51/4/e24

Permissions: Requests for permissions to reproduce figures, tables, or portions of articles originally published
in Hypertension can be obtained via RightsLink, a service of the Copyright Clearance Center, not the Editorial
Office. Once the online version of the published article for which permission is being requested is located,
click Request Permissions in the middle column of the Web page under Services. Further information about
this process is available in the Permissions and Rights Question and Answer document.

Reprints: Information about reprints can be found online at:
http://www.lww.com/reprints

Subscriptions: Information about subscribing to Hypertension is online at:
http://hyper.ahajournals.org//subscriptions/