

## **Hypertension Awareness, Treatment and Control in Kenya**

### **Statement of the problem**

With 86 percent of mortality and morbidity from CVD occurring in developing countries, detection, treatment and control of hypertension is critical in mitigating the growing CV disease burden in this population. The purpose of this study was to examine the pattern of awareness, treatment and control of hypertension among community dwelling Kenyans who presented to a community CVD screening.

### **Background**

There is an emerging epidemic of hypertension (HTN) in sub-Saharan Africa which is predicted to worsen. Uncontrolled HTN is associated with high morbidity and premature mortality; therefore understanding HTN awareness, treatment and control is essential to reduce the sequelae of HTN. The Social Ecological Model and principles of Community Based Participatory Research guided the study.

### **Methods used in the investigation**

A convenience sample of consecutive patients at 5 Kenyan clinics was screened for CVRF by trained US/Kenyan teams using protocols for physiologic measures. HTN was defined as self-reported history (Hx) of HTN (told by a health care provider that they had HTN) or SBP  $\geq$  140 mmHg (mean of 3 readings measured per protocol). Clinical data were abstracted, entered onto excel spreadsheets and imported into Stata<sup>®</sup> for analysis. US/Kenyan IRB approval was obtained.

### **Summary/results of the investigation**

801 individuals (mean age 54 [ $\pm$ 17.5], 77% female, 98% black); 64.65% met criteria for HTN; (Hx HTN (37.95% n=304), SBP  $\geq$  140 mmHg (55.58%, n=448)). Of those with SBP  $\geq$  140 mmHg, 47.20% (n= 211) were not aware they had HTN. Of those with a Hx of HTN, 67.99% had been prescribed HTN meds although compliance was uncertain; 61.07% (n=273) of those with SBP  $\geq$ 140 mmHg were not on HTN meds. Among those with a Hx of HTN who were treated (n=206) 18.45% were controlled (SBP < 140 mmHg).

### **Conclusion of the investigation/interpretation of results**

These data suggest that in this convenience sample of Kenyans, a significant proportion of those who presented for screening were not aware that their blood pressure was high and among those who knew that they had HTN, many were treated but few were at goal. This has implications for nursing practice and policy related to detection (screening), treatment and control (care coordination and follow-up).

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