# PREVALENCE AND AWARENESS OF HYPERTENSION IN AN URBAN TOWNSHIP OF SOUTH AFRICA: COMPELLING NEED FOR ACTION

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In 2000, approximately 50% of stroke, 42% of ischemic heart disease and 9% of deaths in adults aged >30 years in South Africa (SA) were attributable to high blood pressure (BP).<sup>1</sup> Although in most settings hypertension is manageable through lifestyle modification and medication, such management is based on knowledge of one's diagnosis. It is unclear what proportion of Black South Africans are aware of their hypertension status.

We estimated hypertension prevalence, knowledge about hypertension status, and factors associated with knowing hypertension status correctly (ie, were correct in classifying themselves as hypertensive or non-hypertensive) among 637 adults aged  $\geq$  18 years (530 females and 107 males) in Khayelitsha, the largest township in Cape Town. Blood pressure (BP) was measured using an automatic BP monitor (Omron M4-I). The average of two readings taken 2-3 minutes apart on a single visit was used to measure BP. Hypertension was defined as systolic BP  $\geq$  140 mm Hg and/or a diastolic BP  $\geq$  90 mm Hg. 634 study participants also answered a question asking if they had been told that they had high BP in the past year. The study was approved by the ethics committee of UWC, and exempted from full review by Duke University Medical Center's institutional review board.

Prevalence of hypertension was 40.1% in the entire sample, much higher than that reported in African studies conducted in comparable age groups.<sup>2–6</sup> Among hypertensives, 49.2% were aware of their condition, higher than previous reports from African countries.<sup>2,5,6</sup> Among the 621 participants who answered both the question about high BP and had their BP

measured, 440 (70.9%) correctly classified themselves as hypertensive or non-hypertensive (had correct knowledge). Age, educational status, duration of stay in the township and abdominal obesity were associated with correct knowledge, lower odds for older age groups, illiteracy, residency  $\geq 11$  years, and abdominal obesity. In multivariable analysis, only older age was associated with correct knowledge, with those aged 35-54 years [OR = 0.33 (0.19-0.57)] and  $\geq 55$  years [OR = 0.27](0.14-0.54)] having a lower odds compared to those aged 18-34 years. This is a cause for concern since older individuals are at a higher risk for hypertension and should have correct knowledge about their hypertension status. We cannot strictly compare our findings to previous studies<sup>2,5-6</sup> as they focus on assessing factors associated with awareness of hypertension status among hypertensives only, and not among both hypertensives and non-hypertensives. Further, our estimates are likely to be underestimates since we did not consider the criteria of "currently taking antihypertension medication" (information on drug use was not available) in defining hypertension.

The high prevalence of hypertension (40.1%), lack of knowledge of the condition among half of the hypertensive subjects, and incorrect knowledge about hypertension status among nearly one-third of study subjects, especially older age groups who are at a higher risk of being hypertensive, call for immediate action. Health professionals practicing in urban townships in South Africa and other similar settings should measure BP of all individuals aged  $\geq$  18 years at all possible contacts to enable timely detection and increase awareness of hypertension. There is an urgent need to sensitize these health professionals toward hypertension as they might have misconceptions about its etiology and treatment.<sup>7</sup> Community-based health programs should also aim to increase awareness of hypertension as a disease, reduce undetected cases of hypertension, and ensure that individuals are aware of their hypertension status and, if required, get treated for this common problem.

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Africa. Any opinion, findings and conclusions or recommendations expressed in this work are those of the authors, and therefore are not necessarily to be attributed to the NRF.

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