

## **P6258 Burden of hypertension and associated risks for cardiovascular mortality in Cuba: prospective cohort study of 150,000 men and women**

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**Background:** Cardiovascular disease (CVD) is a leading cause of premature death in Cuba. Although raised blood pressure (BP) is an established risk factor for CVD, there is limited evidence on the prevalence and management of hypertension in Cuba.

**Purpose:** To describe the prevalence, awareness, treatment and control of hypertension, and assess the CVD mortality attributable to hypertension in Cuba.

**Methods:** In this prospective study (Cuba Prospective Study), 150 000 adults aged 30 years and over were recruited from the general population in five areas (urban and rural) of Cuba between 1996–2002. BP was measured at recruitment and participants were followed up for certified causes of death to 1.1.2015. Hypertension was defined as systolic BP  $\geq 140$  mm Hg, diastolic BP  $\geq 90$  mm Hg, or self-reported history of hypertension. We calculated the prevalence of hypertension at recruitment and the proportion of hypertensives that were diagnosed, treated and controlled (systolic BP  $< 140$  mm Hg and diastolic BP  $< 90$  mm Hg), overall and in various population subgroups. Cox regression analysis was used to calculate age-specific rate ratios for deaths due to CVD comparing participants with and without uncontrolled hypertension, which were used to estimate the number of CVD deaths attributable to hypertension.

**Results:** Mean age at recruitment was 52 years and 56% were women. Overall, about one-third of participants were hypertensive (38%). Of those with hypertension, about two-thirds were diagnosed (70%); of those diagnosed, about two-thirds were treated (64%); and, of those treated, about one-third had controlled BP (36%). The overall control rate among all hypertensives was 16%. Uncontrolled hypertension was associated with relative risks of CVD mortality of 2.14 (95% CI 1.85–2.47), 1.83 (1.66–2.04) and 1.39 (1.29–1.51) at ages 35–59, 60–69 and 70–79 years, respectively. Uncontrolled hypertension accounted for about 3000 CVD deaths at ages 35–79 years in Cuba in 2013.

**Conclusion:** About one-third of Cuban adults in this large study had hypertension. Levels of diagnosis and treatment were commensurate to some high-income countries, but levels of BP control were low. Our findings suggest that, in addition to public health measures to reduce the prevalence of hypertension, greater BP control among treated hypertensives is required (especially among adults at high absolute risk, such as those with prior vascular disease).

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