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PREVALENCE OF HYPERTENSION AND DIABETES AMONG ETHIOPIAN ADULTS. *L D Nshisso, A Reese, B Gelaye, S Lemmac, Y Berhanec, M A Williams (University of Washington School of Public Health, Seattle, WA)

Objective: To determine the prevalence of hypertension and diabetes among Ethiopian adults and to examine the proportion of adults who were aware of their conditions. Methods: A total of 2,153 of subjects were included in this cross-sectional study. The World Health Organization STEPwise approach for non-communicable diseases was used to collect socio-demographic data, blood pressure measures and blood samples from participants. Prevalence estimates for hypertension and diabetes were determined separately. The 95% confidence intervals for prevalence estimates were also determined. Results: The overall prevalence of hypertension was 19.1% (95% CI: 17.1-20.8) and 22% (95% CI: 20.2-23.8) and 14.9% (95% CI: 13.4-16.4) among men and women respectively. The overall prevalence of diabetes was 6.5% (95% CI: 5.4-7.6) and 6.4% (95% CI: 5.0-7.8) and 6.6% (95% CI: 4.8-8.4) among men and women correspondingly. Notably, 15% of hypertensives reported never having had their blood pressure checked prior to the present study examination. Approximately 45% of participants who had their blood pressure checked were never diagnosed with hypertension, but were found to be hypertensive in our study. Approximately 27% of newly diagnosed diabetics (during this study) reported never having a previous blood glucose test. Among those who had their blood glucose assessed prior to this study, 17.4% were found to have diabetes but were never diagnosed. Conclusion: The high prevalence of hypertension and diabetes reported in our study confirms findings from other Sub Saharan Africa countries where non-communicable diseases are emerging as a major public health concern.

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ASSOCIATION OF SELF-REPORTED AND OBJECTIVELY MEASURED SLEEP DURATION WITH CAROTID ARTERY INTIMA-MEDIA THICKNESS AMONG POLICE OFFICERS. *C C Ma, C M Burchfiel, L E Charles, J M Dorn, M E Andrew, J K Gu, P N Joseph, D Fekedulegn, J E Slaven, T A Hartley, A Mnatsakanova, J Violanti (National Institute for Occupational Safety and Health, Morgantown, WV)

The aim of this cross-sectional study was to examine the association of self-reported sleep duration (SRSD) and objectively measured sleep duration (OMSD) with subclinical atherosclerosis, measured as carotid artery intima-media thickness (IMT) in urban police officers, a group at high risk of cardiovascular disease. Data were collected among 464 officers from the Buffalo, NY Police Department from 2004–2009. Mean maximum IMT (MMXIMT) was the average of the largest 12 values scanned bilaterally from three angles of the near and far wall of the common carotid, bulb, and internal carotid artery. SRSD was obtained via the Pittsburgh Sleep Quality Index questionnaire. OMSD was obtained using actigraphy. Linear and quadratic regression models were used to test the association of SRSD and OMSD with IMT among 431 participants (mean age: 42.3 years) and among 263 participants (mean age: 42.1 years), respectively. A U-shaped association between OMSD and MMXIMT was observed from unadjusted ($P = 0.080$), age-adjusted ($P = 0.031$), and multivariable-adjusted ($P = 0.077$) models using orthogonal polynomial contrast coefficients for a quadratic trend. A similar association was observed between SRSD and MMXIMT. MMXIMT values in participants with between 5.0 and 7.9 hours of SRSD and OMSD were smaller than those with less than 5.0 hours and 8.0 or more hours of sleep. Results show that less than 5.0 and 8.0 hours or more of sleep are associated with increased mean MMXIMT. These findings have important implications regarding sleep and atherosclerosis in police officers.

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MIDDAY NAPS AND THE RISK OF CORONARY ARTERY DISEASE. RESULTS OF THE HEINZ NIXDORF RECALL STUDY. *A Stang, N Dragano, S Moebus, S Moehlenkamp, A Schmermund, H Kaelsch, R Erbel, K H Joeckel (Martin-Luther-University of Halle-Wittenberg, Halle, Germany)

Background: Several studies have assessed the association between midday naps (siesta) and cardiovascular outcomes and reported heterogenous results. Concern exists that confounding might have distorted these results and contributed to discrepancies among them. This study prospectively examines the association between siesta habits and the occurrence of coronary artery disease in a non-mediterranean population. Methods: The baseline examination of 4123 participants aged 45-75 years included interviews, physical examinations, laboratory tests, and electron beam computed tomography. We studied the influence of siesta habits on risk of coronary artery disease. We adjusted for several potential confounders including measures of subclinical atherosclerosis like coronary calcium score and ankle brachial index at baseline. Cardiac events during a median follow-up of 8.1 years were defined as nonfatal myocardial infarction and sudden cardiac death. Results: Overall, 135 out of 4123 subjects (3.3%) either suffered from acute myocardial infarction (81 subjects) or died due to a sudden cardiac death (54 subjects) during follow-up. After adjustment for several confounders including measures of subclinical atherosclerosis, regular long (> 60 min) siesta was associated with an increased hazard ratio of cardiac events (hazard ratio 2.1, 95% confidence interval 1.1-4.0). Conclusions: As our detailed confounder analyses showed, confounding is not the sole explanation for this finding. Future research on siesta should focus on biological mechanisms that may be responsible for increasing the risk of coronary artery disease among subjects taking regular long siesta.

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USUAL SODIUM INTAKE AMONG PRESCHOOL CHILDREN, UNITED STATES 2001 – 2008. *N Tian, Z Zhang, F Loustalot, Q Yang, M Cogswell (Center for Disease Control and Promotion, Atlanta, GA)

Background: Excess sodium intake is associated with high blood pressure which tends to start in childhood. By race-ethnicity, the prevalence of high blood pressure is highest among non-Hispanic black adults. However, limited information exists on how usual sodium intake in non-Hispanic black preschool children compares with that among preschool children in other racial/ethnic groups. We investigated sodium intake among US children aged 1–5 years. Methods: Using 2001-2008 National Health and Nutrition Examination Survey data for 3,067 children aged 1–3 years and 1,454 children aged 4–5 years, we compared mean daily sodium intake and the prevalence of excess sodium intake (>1500 mg/day for children aged 1–3 and >1900 mg/day for those aged 4–5 based on the Institute of Medicine Tolerable Upper Intake Levels) among racial/ethnic groups. Results: Mean sodium intake was significantly higher among non-Hispanic black than among non-Hispanic white or Mexican-American children ($P <$ 0.05 for all comparisons). Among children aged 1–3 years, the prevalence of excess sodium intake was 85% (95% confidence interval [CI]: 82%-90%) among non-Hispanic blacks, 79% (95% CI: 76%-83%) among non-Hispanic whites, and 73% (95% CI: 68%-79%), among Mexican-Americans. Among children aged 4–5 years, the corresponding prevalence rates were 97%, 82%, and 84%, respectively. Conclusions: Most U.S. preschool children consume excessive sodium. Mean sodium intake and the prevalence of excess sodium intake are both highest among non-Hispanic black children. These findings suggest enhanced strategies are needed to reduce sodium intake among preschool children, and particularly among non-Hispanic black children.