**Abstract: P4305**

**Use of drug treatment for secondary prevention of cardiovascular disease in urban and rural communities of China: findings from the China Biobank study of 0.5 million people**

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**Purpose:** Despite recent substantial improvements in the hospital management of Cardiovascular Diseases (CVD) in China, little is known about the determinants of long-term use of drug treatment for secondary prevention of CVD in this country. The aim of this study was to assess the determinants of use of secondary prevention therapy in a large population-based study in China surveyed between 2004 and 2008.

**Methods:** The China Biobank involves over 512,000 adults, aged 30-79, who were recruited from 10 diverse areas across China (5 urban and 5 rural). Self-reported history of doctor-diagnosed CVD was recorded by interviewers, along with information on use of the major classes of drug therapy for secondary prevention of CVD. Among participants with prior history of CVD, the self-reported use of such treatment was related to socioeconomic status, health insurance coverage, CVD risk factors and general health status.

**Results:** Overall, 4.5% of the participants reported having a history of Ishaemic Heart Disease (IHD: 3.0%) or stroke/TIA (1.7%). Of those with a history of either or both, 55.5% reported concurrent use of any treatment and 35.0% reported using any of the following six drug classes: anti-platelet agents (10.6%), statins (1.4%), β-blockers (10.1%), ACE inhibitors (7.6%), calcium channel blockers (18.2%) and diuretics (2.3%). After adjustment for age, sex and region, the prevalence of use of any of the six drugs was higher in people with more education (Odds Ratio [OR] and 95% confidence interval [CI]: 1.8; 1.64-1.99), greater household income (1.4; 1.28-1.49), and a body mass index >27 kg/m² (2.3; 2.23-2.49) and systolic blood pressure >160 mmHg (3.0; 2.84-3.20), compared to those without these. Use of such medication was lower among current smokers (0.8; 0.79-0.89) and alcohol drinkers (0.8; 0.73-0.79). Additional health-related factors were also positively associated with use of such medication, including self-rated poor health status (1.8; 1.70-1.87), diagnosed diabetes (1.4; 1.28-1.52) and in particular, diagnosed hypertension (7.5; 7.08-8.06). Access to health insurance and duration of cardiovascular illness had little effect on relationship with the use of such medication.

**Conclusions:** About two-thirds of individuals with a prior history of CVD reported no use of any medication for secondary prevention of CVD. In addition to socio-demographic and lifestyle factors, diagnosis of hypertension was the most important determinant of use of CVD medication, reflecting a treatment paradigm based on reduction of risk factors rather than on reduction of vascular disease risk.