

Table 3. ABI and Systolic Pressure in Older Population ≥ 40 Years

	Systolic pressure Mean \pm S.D	Age Mean \pm S.D.
ABI normal (≥ 0.95) N=248	144.44 \pm 18.803	63.66 \pm 10.524
ABI abnormal (<0.94) N=482	155.15 \pm 22.074	67.38 \pm 9.943
P-value	0.001	NS

Table 4. ABI Values According to Blood Pressure in Older Population ≥ 40 Years

	ABI Mean \pm S.D	Age Mean \pm S.D.
Normal pressure (<140 mmHg) N=173	0.8607 \pm 0.28261	63.28 \pm 10.384
High pressure (≥ 140 mmHg) N=557	0.7580 \pm 0.28237	66.99 \pm 10.109
P-value	NS	NS

P1435

Epidemiological Survey on Prevalence of Hypertension and Related Risk Factors in a Community (Chengdu, 2008–2009): 5202 Case Analysis

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Introduction: Hypertension prevalence has increased significantly during the last 30 years. This report is one of serial studies on cardiovascular risk factors in population of Chengdu, in 2008–2009; it is focused on hypertension, and its correlation with other cardiovascular risk factors. **Methods:** In this community population survey, 5202 male and female residents of Chengdu, aged 40–79 years were stratified clustering sampling. The population statistical parameters, habits, history, physical and laboratory examination findings were investigated in relation to blood pressure. **Results:** The prevalence of hypertension in this population was 29.4%, (31.0% in men, and 27.8% in women). Classified by the 1999 WHO/ISH guideline, the prevalence of grade-1, 2, 3, hypertension was 18.4%, 6.8%, and 3.2%, separately. The percentages of each consecutive grade as contributors to total hypertension were 64.79%, 23.94%, and 11.27%. While classified as isolated diastolic hypertension (IDH), isolated systolic hypertension (ISH) and diastolic-systolic hypertension (SDH) the prevalence were 3.2%, 12.8% and 12.1%, respectively. When compared the prevalence of hypertension in 2008–2009 (24.65%) to 1979 (6.39%), 1991 (9.07%), and 1999 (15.54%), in adults (>18 yrs) of Chengdu, the prevalence increased significantly. Hypertension prevalence increased steeply with age, the prevalence of 70–79 years is 60.4%, and it was 3.95 times than it in the group of 40–49 years. There was even more high prevalence of prehypertension prevalence in this population, it was 37.5% in total (41.7% in men, 33.0% in women), and the associated risk ratios for diabetes, and some of classic risk factors were higher in prehypertensives than it in the normotensives. The hypertensive awareness, treatment and control rates in this survey were 27.53%, 25.14%, 38.2%, respectively, while the treatment rate and control rate in the general population only 6.3%, 3.3% respectively. The therapeutic drugs in use were as follows: calcium antagonists 26.2% (nifedipine 16.2%), beta-blockers (8.7%), ARB (3.6%), diuretics (2.7%), and ACE inhibitors (1.6%), the others including Chinese traditional medicine (65.4%). Some patients used more than one medication. **Conclusion:** The prevalence of hypertension in Chengdu has increased substantially along with other risk factors. There are unacceptably low awareness, treatment, and control rates in population of community. There is a clear need for greater efforts to detect, treat and control hypertension in Chengdu, China.

Table 1. The Hypertensive Prevalence by Classification

	IDH	SDH	ISH	Controlled	Total
Prevalence (%)	3.15	13.19	12.06	1.0	29.4

Table 2. The Awareness, Treatment and Control Rate of Hypertensives

	Total	Male	Female
Awareness, %	27.5	25.3	29.2
Awareness & Treatment, %	25.1	22.7	27.0
Treatment, %	6.3	5.7	7.8
Treatment & control, %	38.2	24.0	52.0
Control, %	4.7	4.2	5.0

P1436

Relationship Between Social Gradient and Risk of Cardiovascular Death in an Open Urban Population of Western Siberia

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Objective: To assess the relationship between nonconventional risk factors for coronary artery disease and risk of cardiovascular death in urban population of Western Siberia. **Methods:** The epidemiological study was conducted in the open urban population of Tyumen aged 25–64 years using standard methods. During subsequent 12 years (from 1996 till 2008) cardiovascular death rate was studied in male (795 subjects) and female (813 subjects) cohorts. Using Cox proportional hazards model we estimated how social gradient (level of education, occupational and marital status) related to risk of cardiovascular death. **Results:** There were recorded 85 (10.7%) and 33 (4.1%) deaths in men and women, respectively. Primary-educated men had a higher risk of cardiovascular death compared to men with higher education (hazard ratio (HR) 2.5, 95% confidence interval (CI) 1.3–4.7; $p<0.0050$). In females risk of cardiovascular death was also higher (HR 8.2 (95% CI 3.7–18.0; $p<0.0001$) in the primary educated subjects compared to those with secondary education. Risk of cardiovascular death

in males was significantly higher in manual laborers (HR 2.8, 95% CI, 1.2–6.3; $p<0.01$) than in managers. In females risk of cardiovascular death was significantly higher in managers (HR 4.3, 95% CI 1.1–17.9; $p<0.05$), pensioners (HR 5.1, 95% CI 1.4–19.0; $p<0.05$) and manual occupational group (HR 13.2, 95% CI 3.1–56.3; $p<0.001$) compared to high-skill jobs group. Relative to marital status HR was higher in single - 2.3 (95% CI 1.3–4.2; $p<0.001$), widowed - 4.9 (95% CI 2.0–12.0; $p<0.001$) and divorced men - 2.6 (95% CI 1.6–4.3; $p<0.001$) in comparison to married men. In females no association between marital status and cardiovascular death was observed. **Conclusion:** The highest risk of cardiovascular death was indicated in low social class groups (subjects with primary education and manual occupational status) and in single, widowed and divorced men as well.

P1437

Blood Pressure and Drinking Behaviors among Russian Men Aged 30–59 Years

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The extent to which alcohol consumption confers protection against cardiovascular disease remains controversial. However, there is now good evidence that alcohol consumption is associated with increased blood pressure, although most studies of this association have been conducted in populations with moderate levels of consumption. We have conducted a longitudinal study of 1300 men aged 30–59 years sampled at random who were living in a typical Russian city west of the Ural Mountains to determine the health effects of the distinctive, heavy patterns of alcohol consumption found in this population. Based on data collected from interviews with the men and proxy informants, and a physical examination, we have analysed the associations of drinking pattern, type of drink (including non-beverage alcohols such as medicinal tinctures). A very high prevalence of raised blood pressure was found, with 6 out of 10 men being classified as hypertensive, with 10% of men having severe hypertension (blood pressures greater than 180/110 mm Hg). Blood pressure was positively related to average volume of ethanol consumed and with frequency of behaviours such as consumption of non-beverage alcohols and frequent hangovers. Compared to men who did not drink non-beverage alcohols, those who did had an odds ratio of hypertension of 2.45 (95% CI 1.22, 4.94) adjusted for age, body mass index and education. The equivalent effect of frequent hangovers (more than once per month) was 1.95 (95% CI 1.28, 1.96). We estimate that 10% of hypertension can be attributed to hazardous alcohol consumption, the prevalence of which was 14% in this population.



P1439

Are There Etiologic and Outcome Differences among Very Young Asian Women with Coronary Artery Disease Following Percutaneous Coronary Intervention?

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Background and Aim: In Singapore, one-quarter of deaths among women is related to cardiovascular disease and women account for 41% of all cardiovascular-related deaths. Previous reports have suggested that while acute myocardial infarction (AMI) in women occurs more commonly at an older age, it is not solely a disease of elderly women. It is not known if younger women with coronary artery disease (CAD) have unique risk factor profiles or outcome differences compared to older women with CAD. The purpose of this study was therefore to examine the etiology of CAD among younger women below 40 years of age, and to examine whether outcome differences exist when compared to women above 40 years old. **Methods:** We prospectively collected data on 2137 consecutive female patients with CAD who underwent percutaneous coronary intervention (PCI) between 2002 and 2007. Baseline clinical characteristics and patient follow up data were obtained from medical records or telephone follow-up. Primary outcomes were major adverse cardiovascular events (MACE) of myocardial infarction (MI), repeat revascularization and all-cause death at six months, one year and two years. **Results:** There were more ethnic Chinese (68%), compared to Malays (15%), Indians (13%) and other races (4%) with a mean age of 65 years, SD 10. 32 (1.5%) were aged 40 years and below. Compared to older women, a family history of premature CAD and a personal history of prior smoking were associated with CAD among the younger women [OR 4.38 95%CI 1.93–9.91 $p=0.002$ (7% vs. 25%) and OR 2.63 95%CI 1.17–5.92 $p=0.024$ (11 vs. 25%)] respectively. A proportion of young women had systemic lupus erythematosus (6%), end-stage renal failure (6%) or a history of thrombophilia (3%). Compared to the older women, a significant proportion of young women presented for the first time with ST-elevation myocardial infarction (STEMI) requiring acute PCI [OR 3.09 95%CI 1.37–6.97 $p=0.011$ (9% vs. 25%)]. MACE event rates at six months, one year and two years were 1%, 2% and 1% respectively. There was no difference in overall outcome between the groups (9% vs. 7%, $p=1.00$). **Conclusion:** In this multi-ethnic Asian population, smoking and family history of premature CAD is associated with premature CAD among young women in whom a significant proportion present for the first time with STEMI. Young women did not appear to have worse short-term prognosis up to two years. Further studies are warranted to investigate the impact of non-traditional risk factors like lupus and hypercoagulable states on CAD in young women.