trend<0.001) respectively. Addition of ankle-brachial index significantly ($p<0.001$) increased the predictive value of the model for 3-year deaths compared with a model containing risk factors alone. Comparison of areas under receiver operator characteristics curves confirmed that a model including the ankle-brachial index discriminated better than one without.

Conclusions There was an inverse association between ankle-brachial index and mortality. Addition of ankle-brachial index significantly improved the prediction of 3-year mortality over and above that of conventional risk factors. We recommend that ankle-brachial index be incorporated into prognostic assessment for patients with ischaemic heart disease.

e0290 LOWER ESTIMATED GLOMERULAR FILTRATION RATE CORRELATES TO ARTERIAL STIFFNESS IN GENERAL CHINESE WOMEN WITH NORMAL RENAL FUNCTION

doi:10.1136/hrt.2010.208967.290

Bian Suyan, Luo Leiming, Xiao Tiehui, Qi Liping, Wu Hongmei, Xiao Wenkai, Sheng Li, Duan Liufa. *Chinese PLA General Hospital*

Background and Objective Although extensive research has shown the association of decreased renal function with early arteriosclerosis in patients with chronic kidney disease, it's still controversy whether decreased glomerular filtration rate (GFR) and menopause have independent relationship with arterial stiffness in general women residents with normal renal function. The aim of this study was to identify how decreased GFR or menopause contributes to central and peripheral arterial stiffness.

Methods In this cross-sectional study, we randomly recruited 1,131 women residents (mean age: 56.59 ± 14.16 years) with normal GFR levels estimated by the abbreviated Modification of Diet in Renal Disease equation (defined as $eGFR \geq 60$ ml/min/1.73 m²) from three large communities in Beijing. Arterial stiffness was assessed by measuring carotid-femoral PWV (PWVcf), carotid-radial PWV (PWVcr) and augmentation index (AIx) with validated automatic devices. Menopause status was defined by the cut-off age of 50, the median menopause age of Chinese women.

Results Subjects from the lowest eGFR tertile group had the highest PWVcf and AIx, while the values of PWVcr were comparable. Meanwhile, eGFR was inversely correlated with PWVcf and AIx but not with PWVcr. Multiple stepwise regression demonstrated a significant relationship between eGFR and PWVcf, independent of the conventional atherosclerotic risk factors. This association was not significant between eGFR values and PWVcr or AIx. Lower eGFR accompanied by higher PWVcf and AIx was evident in the post-menopause group while the PWVcr values were comparable. Post-menopause was an independent predictor for PWVcf and AIx, but not for PWVcr.

Conclusions In general Chinese women with normal renal function, decreased eGFR seems to affect the core arteries other than the peripheral ones. Post-menopause might play part role in arterial stiffness.

e0291 EFFECTS OF XINFUKANG ORAL LIQUID ON THE ACTIVITIES OF RESPIRATORY ENZYME IN EXPERIMENTAL CONGESTIVE HEART FAILURE RATS

doi:10.1136/hrt.2010.208967.291

Weiwei Wang, Xuebin Cao, Shule Xu, Jiancheng He, Yuanhui Hu. *Department of Cardiology, 252 Hospital of PLA*

Objective To test the effect of Xin Fu Kang Oral Liquid on the activities of respiratory enzyme (I—IV) in pressure overload-induced left ventricular hypertrophy in rats.

Methods The models of congestive heart failure (CHF) were established by constricting the abdominal aorta of rats partly. 75 SD rats were randomly divided into Sham operation (SH), Coarctation of abdominal aorta model group (CAA) and Xinfufang Oral Liquid group (XFK). The activities of respiratory enzyme (I—IV) were respectively measured by spectrophotometric method in every group at the 10th, 12th week after the interventional of the drugs.

Results The study shows that CAA group the activities of respiratory enzyme significantly decreased, the activities of respiratory enzyme II (SDH), IV (CCO) have obviously difference ($p<0.01$). In the XFK group the activities of respiratory enzyme obviously increased compared with CAA and by the 10th, 12th week, SDH, CCO have obviously difference ($p<0.01$). The activities of respiratory enzyme of the 12th week in XFK group obviously increased compared with that of the 10th week, SDH, CCO have obviously difference ($p<0.05$).

Conclusion XinFuKang Oral Liquid can obviously improve the activities of respiratory enzyme of congestive heart failure rats.

e0292 SURVEY OF CURRENT SMOKING STATUS OF PATIENTS AT CARDIOLOGY CLINICS IN BEIJING

doi:10.1136/hrt.2010.208967.292

¹Rong Jing Ding, ²Jinming Yu, ²Lijun Zhang, ¹Dayi Hu. ¹Heart and Vascular Center, Beijing University People's Hospital, Beijing, China ²Epidemiology and Statistics department, Fudan University, Shanghai, China

Objective To understand the current status of smoking patients at cardiology clinics in Beijing municipal Class 3A hospital, so as to target the anti-smoking intervention.

Methods During March 1—10, 2009, the patients presenting at cardiology clinics were consecutively recruited and a questionnaire survey conducted.

Results A total of 816 valid questionnaires were collected. There were 531 males and 336 females with an age range of 22—80 years old. Among these patients, 90.5% knew the fact that smoking was harmful to cardiovascular health, 67.4% non-smokers, 15.8% smokers and 15.8% quitters. The smoking rate among the patients with coronary heart disease, diabetes mellitus, hyperlipidaemia and hypertension was 28.4%, 46.7%, 50% and 73.3% respectively. The smokers consumed a median of 15 cigarettes per day. 71.8% of them did not wish to quit. Those with nicotine dependence score under 4 accounted for 64.2% and above 5 accounted for 35.8%. The quitting urge had no correlation with nicotine dependence score or cardiovascular disease categories.

Conclusion The smoking rate among the patients presenting at cardiology clinic is lower than that of general population. The smokers had a lesser urge to quit. Besides strengthening smoking-quitting interventions in coronary heart disease patients an out-patient department, cardiologist should also do so for those smokers with cardiovascular risk factors.

e0293 SURVEY 2009 OF CURRENT SMOKING STATUS OF URBAN AND RURAL RESIDENTS IN BEIJING REGION

doi:10.1136/hrt.2010.208967.293

¹Rong Jing Ding, ²Jinming Yu, ²Lijun Zhang, ¹Dayi Hu. ¹Heart and Vascular Center, Beijing University People's Hospital, Beijing, China ²Epidemiology and Statistics Department, Fudan University, Shanghai, China

Objective To understand the smoking rate, distribution characteristics and quitting urge of urban and rural populations in Beijing region in 2009 so as to provide basal materials for future anti-smoking population interventions.

Methods During July–August, 2009, a questionnaire survey of stratified cluster sampling was conducted among 7421 permanent residents over 18 years old in 4 Beijing districts. The responders had an age range of 20–89 years old.

Results (1) In 2009, the smoking rate of urban and rural Beijing residents was 24.98%. The smoking rate of rural population was higher than that of urban counterpart (urban 15.41%, urban-rural 21.20% & rural 29.73%). The smoking rate was higher in males than females (57.18% vs 7.43%). (2) Overall speaking, the smoking rate was higher in those with a lower educational level than those with a higher educational level. The smoking rate tended to be different with the advancing ages in male and female populations. It increased with the advancing age in males and decreased with the advancing age in females. The magnitude of smoking rate had no obvious correlation with the undertaken occupations. (3) Analysis of anti-smoking urge: Disease prevention accounted for 52.65%, morbidity 22.57%, family objection 18.14%, environmental limitation 5.95%, promotion & education exhibition 5.75% and physician advising 3.98%. The major anti-smoking-related factors include cardiocerebrovascular sequel, diabetes, dyslipidemia and attending health workshops.

Conclusion As compared with the results of previous surveys, the smoking rate decreased slightly in the Beijing urban residents. The major aspect of smoking-quitting urge is disease prevention. And the anti-smoking education should be strenuously intensified.

e0294 SURVEY OF EPIDEMIOLOGICAL CHARACTERISTICS OF MAJOR CHRONIC DISEASES IN URBAN AND RURAL BEIJING RESIDENTS OVER 18 YEARS OLD IN 2009

doi:10.1136/hrt.2010.208967.294

¹RongJing Ding, ²Jinming Yu, ²Lijun Zhang, ¹Dayi Hu. ¹Heart and Vascular Center, Beijing University People's Hospital, Beijing 100044, China; ²Epidemiology and Statistics Department, Epidemiology and Statistics Department, Fudan University, Shanghai, China

Objective To understand the epidemiological characteristics and control levels of major chronic diseases in Beijing municipality in 2009.

Methods During July–August 2009, a questionnaire survey of stratified cluster sampling was conducted among 7421 permanent residents over 18 years old in 4 Beijing districts. The surveying method included questionnaire, physical examination and laboratory testing.

Results The rates of morbidity, awareness, medication and control for hyperlipidaemia were 53.97%, 28.05%, 13.05% and 10.03% respectively. Those for hypertension were 52.33%, 64.29%, 57.53% and 19.9% respectively. For diabetes, 13.63%, 71.23%, 68.39% and 32.73%. The morbidity rates of hypertension and diabetes increased with the advancing age, the morbidity of hyperlipidaemia decreased with the advancing age, and were all higher in the urban population than in the urban population. The rates of awareness, treatment and control for major chronic diseases were all higher in the urban population than the rural counterpart and were lower in the youth than the elders. The morbidity rates of lower extremity atherosclerosis, coronary heart disease and stroke were 11.0%, 6.0% and 4.4% respectively.

Conclusion As compared with the results of previous surveys, in both urban and rural areas, the morbidity rates of major chronic diseases increased markedly in permanent Beijing residents over 18 years old in 2009. The morbidity level of major chronic diseases remains higher in the urban population than in the rural counterpart. The youth has a markedly elevated morbidity rate of chronic diseases. The control of chronic diseases should be implemented in both urban and rural Beijing. And the focus is placed upon the young individuals.

e0295 TREND COMPARISON OF MAJOR CHRONIC DISEASES IN URBAN AND RURAL BEIJING AREAS DURING 2007–2009

doi:10.1136/hrt.2010.208967.295

¹Rong Jing Ding, ²Jinming Yu, ²Lijun Zhang, ¹Dayi Hu. ¹Heart and Vascular Center, Beijing University People's Hospital, Beijing, China; ²Epidemiology and Statistics Department, Fudan University, Shanghai, China

Objective To evaluate and compare the trends of major chronic diseases in urban and rural Beijing areas during 2007–2009.

Methods During July–August in 2007 and 2009, a cross-sectional survey of stratified cluster sampling was conducted respectively among 10002 and 7421 permanent residents over 18 years old in 4 Beijing districts. The surveying method included questionnaire, physical examination and laboratory testing.

Results Within the 2-year period, the prevalence of hyperlipidaemia, hypertension and diabetes in urban and rural Beijing populations increased by 2.32%, 7.75% and 2.59% respectively. The awareness rate increased by 5.55%, 1.5% and 9.36% respectively. Except for a decline of 3.32% for hyperlipidaemia, the treatment rate increased by 2.77% and 8.61% respectively. The control rate had not a marked increase, but there was a declining trend of 1.22%, –4.54% and 0.67% respectively. Within the last 2 years, mean total cholesterol decreased by 0.302 mmol/l, mean low-density lipoprotein and mean body mass index increased by 0.419 mmol/l and 0.455 kg/m² respectively. The increment was higher in females than males. The smoking rate declined by a percentage of 1.73. The prevalence of lower extremity atherosclerosis increased from 4.65% to 11.0%. With a fourfold increment in rural population, it was higher in females than males. The total prevalence of coronary heart disease and stroke didn't made any changes within 2 years. But there were difference and change patterns about the prevalence of CHD and stroke between urban and rural areas.

Conclusion There has been an upward trend in the prevalence of major chronic diseases in urban and rural Beijing residents over the last 2 years. With a low control rate, the urban population has a higher prevalence than the rural counterpart. Besides education promotion, the intervention efforts for chronic diseases in Beijing urban and rural areas should be strengthened.

e0296 COMMUNITY-HOSPITAL CLASSIFICATION MANAGEMENT MODEL RESULTS

doi:10.1136/hrt.2010.208967.296

¹Xin Zhao, ²Ying-Jue Xu, ¹Rui-Jie Li. ¹Second Hospital of Chaoyang District, Beijing; ²North China Coal Medical College

Background Hypertension is a common disease that seriously endangers the health of populations, frequently-occurring disease, is one of stroke, coronary heart disease the major risk factors. At present, China in the prevention and treatment of hypertension, the “three low, three high, three errors”, namely, (three high: prevalence rate, high morbidity and mortality is high; three low: low awareness rate, treatment rate is low, the control rate is low; three errors: do not want medication, do not tolerate no medication, no medication by your doctor) the situation has not significantly improved, the low rate of effective control of hypertension phenomenon is a widespread problem. At home and abroad a large number of studies have shown that people in the community to implement the classification of hypertension management is the crowd the key to prevention and treatment of cardiovascular and cerebrovascular diseases. Current hypertension management at different levels of remaining on the following questions, (1) Comprehensive chronic disease prevention and control capacity of the community vacancy. Community Health Workers of knowledge, lack of technical skills,