inversely associated in female. In both genders, current smoking status and dietary habits were significantly associated with an elevated homocysteine level in our study group. The elevated Hcy levels among rural Chinese population need to be decreased urgently. Our study supports existing recommendations for rural Chinese to maintain a physically active behaviors and healthy lifestyle habits.

GW26-e4455
Respiratory Tract Infection: the Key threat to the Hospitalized adults aged 80 and older
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OBJECTIVES Evaluating the characters of cause of death of the hospitalized geriatric adults to identify their mortality patterns, providing the evidence for the therapy strategy for management of the hospitalized adults aged 80 and older.

METHODS 1684 death records of the hospitalized patients 65 years and older (65~110 year old) from January 2005 to June 2014 in Sichuan Provincial People’s Hospital were included and divided into the group of younger than 80 years old (aged 65~79) and the group of 80 and older, the cause of death of each record was identified according to the international Classification of diseases-10 (ICD-10) and analyzed.

RESULTS 1) Among the 1684 records, 997 (55.9%) were 80 and older, 742 (74.4%) male and 255 (25.6%) female, the length of stay were 26.28±31.96 d and 20.55±25.40 d respectively. Heart failure, coronary heart disease and carcinoma ranked among the top three causes of death in the group of younger than 80 years old, while the sequence was pulmonary infection, carcinoma and heart failure in the 80 and older.

2) By subtoital, the constituent ratio of respiratory tract infection as the cause of death in the 80 and older significantly increased (41.62% vs 41.62%) and the cardiovascular and basal ganglia cerebrovascular disease decreased compared with the younger group (37.93% vs 31.30%) (P<0.001);

3) Compared with the younger group, the constituent ratio of respiratory infection as the cause of death in the 80 and older increased in both in the Geriatric Department (22.14% vs 22.10%) (P<0.001) and the Cardiology Department (23.50% vs 7.70%) (P<0.001). The constituent ratio of carcinoma as the cause of death in the Geriatric Department decreased in the 80 and older (28.40% vs 45.50%, P<0.001).

4) The constituent ratio of respiratory infection as the cause of death increased both in the male (44.74% vs 17.6%) and female (32.55% vs 13.81) in the 80 and older compared with the younger group (P<0.001), while cardiovascular and basal ganglia cerebrovascular disease decreased (male: 26.95% vs 55.60%, female: 44.31% vs 62.34%) (P<0.001). Respiratory infection (44.74%) and cardiovascular and basal ganglia cerebrovascular disease (44.31%) were the first cause of death to male and female of 80 and older respectively (P<0.001).

CONCLUSIONS Respiratory infection should be regarded as the key threat of death to the hospitalized 80 and older adults, especially to the elder male, the mortality risk of cardiovascular and basal ganglia cerebrovascular disease decreased correspondingly in the elderly.

GW26-e1446
High plasma uric acid level is a risk factor for arterial stiffness: a community-based prospective follow-up study
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OBJECTIVES The current longitudinal study aimed at identifying the relationship between uric acid (UA) and arterial stiffness.

METHODS A longitudinal study in a routine health check-up population was performed according to an average of 4.8 years’ follow-up. The uric acid, anthropometric and anthropometric parameters at baseline were obtained. The baseline and the follow-up arterial stiffness (pulse-wave velocity, PWV) and biomarker variables including UA were measured. Pearson’s correlations and regressions were used to identify the relationship between UA and arterial stiffness. Plasma UA levels were categorized by its quartiles [Quartile 1 (≤238.95 mmol/L, n=370), Quartile 2 (239-284.60 mmol/L, n=352), Quartile 3 (284.61-341.85 mmol/L, n=372), and Quartile 4 (≥341.90mmol/L, n=353)] for further analyses by Logistic regression to determine the risk factors and predictors for arterial stiffness.

RESULTS A total of 1447 valid follow-ups were available for the analyses. UA was closely associated with arterial stiffness both at baseline and follow-up: carotid-femoral PWV (cf-PWV: r=0.154, P<0.001 and r=0.153, P<0.001, respectively) and carotid-radial PWV (cr-PWV: r=0.140, P<0.001 and r=0.145, P<0.001, respectively). Multiple regressions also indicated the relationship between UA and arterial stiffness at baseline (cf-PWV: r = 0.096, p = 0.059; cr-PWV: r = 0.252, p = 0.001). Logistic regressions revealed that higher baseline UA level was an independent predictor for arterial stiffness assessed by cf-PWV at follow-up cross-section (Quartile 3 vs. Quartile 1: OR=1.449, P = 0.001; Quartile 4 vs. Quartile 1: OR=2.941, P<0.001).

CONCLUSIONS Given a higher level of UA in normal range, UA was tightly related with arterial stiffness and it is an independent risk factor and predictor for arterial stiffness which may provide novel stratifications and managements of cardiovascular diseases.

GW26-e3867
Association between Hyperhomocysteinemia and Sleep Variables in rural Liaoning Province Han residents of China
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OBJECTIVES Hcy are independent risk factors for cardiovascular diseases. And sleep disorders such as daytime sleepiness, snoring, apnea, sleep disruption and sleep duration have also been associated with the risk of cardiovascular diseases. However, studies evaluating a direct pathogenetic link between Hcy and the sleep variables are debatable.

METHODS A population-based cross-sectional study of 5,992 participants (aged 35 years old and older) was conducted in rural Liaoning Province during 2012–2013. The sleep variables included daytime sleepiness, snoring, apnea, sleep disruption and sleep duration. The main outcome was Hcy, defined as plasma levels of homocysteine >15um/L.

RESULTS Daytime sleepiness was significantly associated with Hcy (multivariate-model2 OR,1.533;95%CI,1.166–2.105, P = 0.008) but snoring, apnea and sleep disruption were not. sleep duration:<6h(multivariate-model 1 OR,1.207;95%CI,1.019–1.430, P = 0.030) and >8h(multivariate-model1 OR,1.206;95%CI,1.055–1.377, P = 0.006) were significant in the age, sex-adjusted model and multivariate-adjusted model 1. However, sleep duration was not significant in multivariate-adjusted model 2. All the three models showed that each superposed sleep variables (daytime sleepiness and apnea-multi- variate-model2 OR,1.377;95%CI,1.107–1.228, P = 0.012), ‘daytime sleepiness, apnea and sleep disruption’ (multivariate-model2 OR,1.149;95%CI,1.086-3.863, P = 0.027), ‘daytime sleepiness, apnea, sleep disruption and sleep duration:<8hours’ (multivariate-model2 OR,1.388;95%CI,1.309–1.151, P = 0.015) was significantly associated with hyperhomocysteinemia.

CONCLUSIONS Our results present the association between Hcy and daytime sleepiness, ‘daytime sleepiness and apnea’, ‘daytime sleepiness, apnea and sleep disruption’, ‘daytime sleepiness, apnea, sleep disruption and sleep duration:<8hours’. Besides, the risk of Hcy increased with the increasing superposition of the sleep variables.

GW26-e3872
Association between elevated Serum Alanine Aminotransferase and Cardiometabolic Risk Factors in Rural Chinese Population: A Cross-Sectional Study
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OBJECTIVES Elevated alanine aminotransferase (ALT) may be associated with metabolic syndrome and cardiovascular diseases. This study aimed to investigate the association between elevated ALT and cardiometabolic risk factors in rural Chinese population.

METHODS This was a cross-sectional study conducted from July 2012 to August 2013, including a total of 11573 subjects (5537 men and 6016 women) aged ≥35 years in rural areas of Liaoning Province. Physical examination and metabolic indicators were conducted under standard protocols. Subjects were divided into elevated ALT level (<40U/L) and normal ALT level (≥40U/L).