

the strength of association between BP measurements at different ages, and cross-tabulated quintiles of BP levels with advancing age was used to quantify the likelihood of maintaining BP in either the top or bottom quintile at later measurements.

Results: The correlation coefficients decreased in magnitude with increasing length of time between readings from the same age. The greatest tracking coefficients for systolic BP and diastolic BP over 10 years was in men aged 45–54 years and in women aged 65–74 years. At the same time interval between measurements, the correlation coefficients in women were greater than in men for systolic BP and diastolic BP, though were smaller than men for pulse pressure among those older than 55 years. The relative likelihood of tracking was greater for systolic BP than diastolic BP and decreased in magnitude with increasing length of time between readings from the same age. Compared with men, women in the top or bottom of systolic BP quintile were more likely to maintain their position up to 20 years, except that women aged 45–64 years were less likely to remain at the top quintile in a 15-year interval.

Conclusion: Tracking of BP is noted from middle age to old age, and it is more evidenced for systolic BP than diastolic BP and greater for women than for men.

Keywords: blood pressure, tracking, cohort study, population

A15934 DAILY SODIUM INTAKE UNFAVORABLY AFFECTED THE CONTROL OF THE OFFICE AND HOME BLOOD PRESSURE IN PATIENTS WITH RESISTANT HYPERTENSION

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Objectives: This study aimed to examine the association between daily sodium intake and the blood pressure (BP) control in resistant hypertension (RH).

Methods: We consecutively recruited 147 RH patients (47.6% male, age 54.14 ± 16.15 years) who received at least three antihypertensive drugs (Anti-HD) including diuretics. 24-hour urinary sodium excretion (24h-UNA) was tested to estimate the daily sodium intake. Home BP monitoring (HBPM) consisted of 4 measurements daily (before medicine in the morning, 10 a.m., 4 p.m., before sleeping at night). Office BP was recorded between 8 to 10 a.m. before taking medicine. Ambulatory BP monitoring (ABPM) was obtained for each patient. Multiple logistic regression analysis was performed, the variables including age > 65 years, sex, education, BMI ≥ 28 kg/m², waist circumference, alcohol consumption, current smoking, eGFR, 24h-UNA, use of spironolactone and quantity of Anti-HD. The high, medium, and low 24h-UNA were defined as > 200mmol/24 h, 100–200mmol/24 h, and < 100mmol/24 h, respectively.

Results: In the multivariate logistic regression models, high and medium 24h-UNA were negatively associated with achieving targets of office BP (p = 0.049 and 0.015), and morning home BP (p < 0.001 and 0.026). The eGFR was negatively associated with office BP (p = 0.021), 4 p.m. (p = 0.002) and night home BP (p = 0.012). Compared with three Anti-HD, four or more drugs' treatment was not associated with the higher BP control rate for either office or home BP (only except 4 p.m. BP).

Conclusion: High sodium intake is a negative predictor for office and morning BP target attainment, which is probably due to high-sodium related hyperresponsiveness of arteries to catecholamine. Our findings emphasize the importance of sodium restriction in the treatment of RH.

Keywords: Resistant hypertension, sodium intake, home blood pressure,

A16175 BARRIERS TO BLOOD PRESSURE CONTROL AND TREATMENT ADHERENCE IN HYPERTENSIVE MANAGEMENT: AN OBSERVATIONAL STUDY IN RESOURCE-POOR SETTING HOSPITAL

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Objectives: Hypertension is the major driver of the cardiovascular epidemic facing Indonesia in the 21st century. In resource-poor settings, reasons for inadequate control of hypertension are heterogeneous and include low adherence to anti-hypertension medication or low compliance with scheduled follow-up visits. Penawar Medika Hospital (PMH) is located in Tulang Bawang-a remote area 372 kms away from the capital city of Indonesia. At present very little is known about hypertension treatment and blood pressure control among hypertensive patients in this area. The aim of this study was to investigate hypertension treatment and control in a hospital setting in Tulang Bawang.

Methods: This descriptive study used data collected from medical records of hypertensive patients in Outpatient Department of PMH between 1 January 2017 to 31 December 2017.

Results: There were 160 patients. Their mean age was 55.58 ± 12.61 years old. Patient diagnosed in the first visit as having hypertension stage 1 were 30.6% while hypertension stage 2 were 69.4%. Patients receiving monotherapy was 69.4% and the rest received combination therapy. Only 13% of these patients complied with their scheduled follow up visits and only 9.4% could achieve targeted blood pressure. Receiving combination therapy was the strongest predictor of poor treatment compliance (OR = 1,173, p = 0.039, 95% CI:0.998–1.379) while higher stage of hypertension, i.e, patients with Hypertension Stage 2, was the predictor of poor control of blood pressure (OR = 1,121, p = 0.039, 95% CI:1,033–1,216)

Conclusion: Treatment compliance and control of blood pressure are extremely low in this setting. Efforts should be made to improve assessment of hypertensive patients, optimise antihypertensive therapy and promote patient adherence to treatment.

Keywords: Hypertension, Compliance, blood pressure control

A14501 RISK OF CARDIOVASCULAR DISEASE AMONG MIDDLE-AGED CHINESE POPULATION WITH HYPERTENSION AND OVERWEIGHT/OBESITY: RESULT FROM A 63 YEARS FOLLOW-UP STUDY

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Objectives: To investigate the contribution of hypertension and overweight / obesity to cardiovascular disease (CVD) events in the middle-aged population of China.

Methods: The baseline was conducted in 2010, and the follow-up survey was done in 2017. Participants with 24 ≤ BMI < 28 kg/m² was defined as overweight, BMI ≥ 28 kg/m² was defined as obesity. Those with 130 ≤ SBP < 140 mmHg / 80 ≤ DBP < 90 mmHg was defined as prehypertension, and SBP ≥ 140 / DBP ≥ 90 mmHg or took antihypertension medications within the latest two weeks was defined as hypertension.

Results: Of 8,965 subjects in baseline, 8,635 participants were eligible for final analysis. The prevalence of overweight, obesity and hypertension were 39.33%, 20.42% and 38.01%, respectively. In addition, 15.46% of participants have both overweight and hypertension, 11.50% of them have both obesity and hypertension. After adjusting for confounding factors (age, sex, smoking status, alcohol consumption, diabetes mellitus, TC, HDLC, or BMI), the hazard risk (HR) for CVD events was 1.74 (95% CI: 0.88–3.44) in the prehypertension group and 4.76 (95% CI: 2.53–8.97) in the hypertension group comparing with normal blood pressure group (P for trend < 0.001), the HR was 1.11 (95% CI: 0.76–1.62) in overweight and 1.72 (1.16–2.54) in obesity comparing with normal weight group (P for trend = 0.027). When BMI and hypertension both considered, HR was 3.01 (95% CI: 1.62–5.58) in participants with hypertension or overweight/obesity and 5.82 (95% CI: 3.16–10.72) in participants with both hypertension and overweight/obesity, respectively (P for trend < 0.001) comparing with those with neither hypertension or overweight/obesity.

Conclusion: CVD risk increased dramatically among those with both hypertension and obesity, thus, both hypertension and obesity should be intensively managed to prevent CVD.

Keywords: overweight, obesity, hypertension, cardiovascular disease

A15472 EFFECT ANALYSIS OF "SHUANG QUAN PROGRAMME" ON COMMUNITY REMOTE HEALTH MANAGEMENT OF HYPERTENSIVE

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Objectives: The Internet cloud platform and intelligent hardware are applied to remote health management for hypertensive patients signed by family doctors, so as to improve the prevention and treatment effect of family doctors on hypertension patients and managerial effectiveness. Further strengthening the information construction of the hospital, building a demonstration community of long range management of chronic disease.