

GW23-e2665

THE EPIDEMIOLOGICAL CHARACTERISTICS OF BLOOD PRESSURE DISTRIBUTION AMONG RURAL RESIDENTS IN TIANJIN OF CHINA

doi:10.1136/heartjn1-2012-302920d.7

Wang jin Hua, Wang Jin Hua. *Tianjin Medical Universtiy General Hospital*

Objectives To evaluate the up-to-date epidemiological characteristics of blood pressure distribution among rural residents in Tianjin of China

Methods A cross-sectional survey was conducted between September and October 2011. Of 1937 individuals aged 35–74 years

were recruited from 6 villages in Tianjin, China. We compared the differences of blood pressure distribution by age and gender.

Results Overall, the mean SBP was 140.97 mm Hg, 141.23 mm Hg of men, 140.95 mm Hg of women, and there was not significant difference ($p=0.781$). The total mean DBP was 86.63 mm Hg, 87.85 mm Hg of men, 85.87 mm Hg of women, DBP in men was more than in women, $p=0.001$. The results indicated that the mean of SBP increased with age ($p<0.001$), 131.40 mm Hg in aged 35–44 years, 138.41 mm Hg in aged 45–54 years, 144.49 mm Hg in aged 55–64 years, and 150.16 mm Hg in aged 65–74 years, respectively. However, the mean of DBP, 85.26 mm Hg in aged 35–44 years, 87.76 mm Hg in aged 45–54 years, 87.17 mm Hg in aged 55–64 years, and 84.66 mm Hg in aged 65–74 years, respectively, greater occurring in aged 45–54 years and 55–64 years. Both SBP and DBP, the means in men were greater than in women, $p<0.05$. The categories of blood pressure distribution presented that 8.93% individuals with optimal BP (SBP <120 mm Hg, and DBP <80 mm Hg), 23.60% with normal BP (120 mm Hg \leq SBP <130 mm Hg, and 80 mm Hg \leq DBP <85 mm Hg), 16.66% with prehypertensive (130 mm Hg \leq SBP <140 mm Hg, and 85 mm Hg \leq DBP <90 mm Hg), 25.75% with stage I hypertensive (140 mm Hg \leq SBP <160 mm Hg, and/or 90 mm Hg \leq DBP <100 mm Hg), 16.65% with stage II hypertensive (160 mm Hg \leq SBP <180 mm Hg, and/or 100 mm Hg \leq DBP <110 mm Hg), 8.41% with stage III hypertensive (SBP ≥ 180 mm Hg, and/or DBP ≥ 110 mm Hg). All categories were 5.94%, 20.62%, 17.91%, 25.22%, 17.98%, and 9.70% in men, respectively; 10.88%, 24.08%, 15.77%, 25.92%, 15.67%, and 7.72% in women, respectively. The proportion of individuals with optimal and normal in men and aged 65–74 years were lower than in women and aged 35–44 years, $p<0.05$. The individuals with stage I, II, and III hypertensive appeared rising with age. The characteristics of BP distribution in men aged 65–74 years were different from women with same age group, had lower percentage of normal BP (6.2%), and higher percentage of stage I, II hypertensive (31.78%, and 25.58% respectively) than women.

Conclusions The mean BP among rural residents aged 35–74 years are the highest in Tianjin, China, 141 mm Hg of SBP, and 87 mm Hg of DBP. Especially, the mean SBP and DBP in men aged 35–44 years are greater than in women aged 35–44 years. More than half of the residents appear hypertensive. Thus, we predict that the incidence of stroke and cardiovascular diseases would increase in future, China. The top priority is to shift improvement of hypertension to young men in rural. It is important to prevent cardiovascular and cerebrovascular diseases in China.