Objectives This study was to investigate trends of hypertensive prevalence, awareness, treatment, and control rates among adult community population aged 40–79 years in Chengdu from 1999 to 2009.

Methods Two cross sectional epidemiological surveys were conducted among adult community population of Chengdu aged 40–
79 years in 1999 (n=4350) and 2009 (n=5456) using multistage clustering sampling separately. The demographic characteristics, blood pressure (BP) and associated risk factors were examined for all of subjects.

**Results** Mean levels of systolic BP and diastolic BP in subjects of 1999 and 2009 increased from 117.83±33.86 mm Hg to 132.10±21.16 mm Hg (p<0.001), and 75.28±19.14 to 79.25±11.15 mm Hg (p<0.001) over past decade, respectively. The age and sex standardised prevalence of hypertension increased from 27.68% (1999–2000) to 29.40% (2009–2010) (p<0.001). The awareness rate increased slightly, from 37.70% to 42.52% (p<0.001). The treatment rate increased from 20.91% to 28.04 significantly (p<0.0001). While among subjects aware of their hypertension, the treatment rate increased from 46.85% to 65.80% (p<0.001). In community Hypertensive, control rate increased from 6.51% (1999–2000) to 6.85% (2009–2010) (p=0.6684). Nevertheless, in hypertensives who aware and treated, the control rate remarkably decreased from 32.52% to 24.34% (p=0.020).

**Conclusions** Hypertension prevalence increased steadily over last decades, while awareness, treatment and control rates remained unacceptably low. There were little improvements in hypertension awareness and control rate. It was suggested that community health education is one of critical issue for hypertensive management. More efforts should be taken to improve awareness in community population, as well as treatment and control rates.