Antihypertensive prescribing pattern and blood pressure control among hypertensive patients over a ten year period in a primary care setting in Malaysia

ABSTRACT

Suboptimal control blood pressure (BP) leads to multiple complications. This study aims to examine BP control and the change in prescribing pattern of antihypertensive agents over a 10-year period. Data was obtained from the 10-year retrospective cohort of randomly selected adult patients registered with the Department of Primary Care Medicine Clinic at the University of Malaya Medical Centre. Demographic data, BP and antihypertensive drug use in 1998, 2002 and 2007 were captured from patient records. Target BP control was defined as BP <140/90mmHg for those with hypertension alone and <130/80mmHg for those hypertensives with concomitant diabetes mellitus or chronic kidney disease. A total of 886 hypertensives patients were recruited. The mean age was 57.2 years (SD±9.6); 63.1% were female. The mean BP at baseline and at the end of 10-year were 146 / 87 (18/10) mmHg and 136/80 (16/9) mmHg respectively. In 1998, 74.3%, 22.5% and 1.6% were on monotherapy, 2 agents and ≥3 agents respectively. In 2007 after 10 years, 24.9%, 46.5% and 26.9% were on monotherapy, 2 agents and ≥3 agents respectively. At the end of 10 years there was improvement in overall blood pressure control, increasing from 15.6% in 1998 to 43.7% in 2007. However, the control rate of BP is still far from optimal in spite of an increase in the number of agents per patients used over a 10 year follow-up. Based on our study the majority of patients with hypertension will need 2 or more agents to achieve target BP.

Keyword: Antihypertensive; Blood pressure control; Cohort; Hypertension; Malaysia; Prescribing; Primary care