

Audit of hypertension management at public primary care clinics in Machang district, Kelantan, Malaysia

Azila Abas

Pulai Chondong Health Clinic, Machang, Kelantan, Malaysia

ABSTRACT

Introduction: Hypertension is a major risk factor for cardiovascular diseases. Lowering the blood pressure can reduce the risk of complications to the brain, heart, and kidney. The audit was conducted to assess the adequacy of blood pressure control and adherence to optimal care including for other cardiovascular risk factors. **Materials and Methods:** A cross-sectional study of hypertensive patients was done in September 2022. Samples were from 8 public primary care clinics in Machang, Kelantan. Data was collected based on standard questionnaires (socio-demographic, clinical parameters including blood pressure and body mass index, laboratory parameters, cardiovascular risk stratification, non-pharmacological and pharmacological intervention status). **Results:** A total of 232 patients with hypertension were selected in this study. Those who were diabetic or pre-diabetic were excluded. The demographic data showed that 70.7% (n=164) were female patients and 29.3% (n=68) were males. The median age was 61 years old. The ethnicity of the patients followed the local demographic profile: Malay 96.6% (n=224), Chinese 3% (n=7) and others 0.4% (n=1). Approximately 50.9% (n=118) of hypertensive patients were obese and 94.4% (n=219) had at least one comorbidity. Controlled blood pressure (<140/90 mmHg) was achieved in 62.1% (n=144) of patients. The mean age of the controlled blood pressure group was 59.76 compared to 63.01 in the uncontrolled group (p=0.029). There was no significant difference in terms of gender (female vs male, 69.4% vs 30.6%, p > 0.05) and obesity status (obese/overweight vs normal body mass index, 80.4% vs 19.6%, p > 0.05) in blood pressure control. Most of the patients received optimal care (>90%), in terms of evaluation of target organ damage and complications, and non-pharmacological and pharmacological management. Overall, 97.8% (n=227) were risk stratified in the past year. Out of overweight and obese patients, 53.7% (n=102) have gained weight in the past year. Meanwhile, 64.6% (n=104) did not achieve the targeted level of low-density lipoprotein according to their risk stratification. **Conclusion:** These findings indicated that blood pressure control was better compared to 45% in NHMS 2019. Older patients tend to have more uncontrolled blood pressure. The process of care was appropriate. However, control of other cardiovascular risk factors like obesity and dyslipidaemia is still lagging. This warrants a more holistic approach to improve the overall outcome of these hypertensive patients.