

Poor blood pressure control and its associated factors among older people with hypertension: a cross-sectional study in six public primary care clinics in Malaysia

ABSTRACT

Introduction: Hypertension is highly prevalent in the older people. Chronic disease care is a major burden in the public primary care clinics in Malaysia. Good blood pressure (BP) control is needed to reduce the morbidity and mortality of cardiovascular disease (CVD). This study aimed to determine the status of BP control and its associated factors among older people with hypertension in public primary care clinics.

Materials and methods: A cross-sectional study on hypertensive patients aged 18 years and above was conducted in six public primary care clinics in Federal Territory, Malaysia. A total of 1107 patients were selected via systematic random sampling. Data from 441 (39.8%) patients aged 60 years and more were used in this analysis. BP control was determined from the average of two BP readings measured twice at an interval of 5 min. For patients without diabetes, poor BP control was defined as BP of $\geq 140/90$ mm Hg and $\geq 150/90$ for the patients aged 80 years and more. For patients with diabetes, poor control was defined as BP of $\geq 140/80$ mm Hg.

Results: A total of 51.7% ($n = 228$) of older patients had poor BP control. The factors associated with BP control were education level ($p = 0.003$), presence of comorbidities ($p = 0.015$), number of antihypertensive agents ($p = 0.001$) and number of total medications used ($p = 0.002$). Patients with lower education (less than secondary education) (OR = 1.7, $p = 0.008$) and the use of three or more antihypertensive agents (OR = 2.0, $p = 0.020$) were associated with poor BP control.

Conclusion: Among older people with hypertension, those having lower education level, or using three or more antihypertensive agents would require more attention on their BP control.

Keyword: Blood pressure; Older people; Hypertension; Primary care; Malaysia