

Pharmacist's Contribution to Blood Pressure Outcome and Quality of Life of Hypertensive Patients

Phayom Sookaneknun^{1*}, R.Michael.E.Richards², Jaratbhan Sanguansermisri¹ and Chai Teerasut³

¹Department of Pharmaceutical Science, Faculty of Pharmacy, Chiang Mai University, Chiang Mai 50200, Thailand

²Faculty of Pharmacy, Mahasarakham University, Mahasarakham 44150, Thailand

³Srisaket Hospital, Srisaket 33000, Thailand

* Corresponding author. E-mail: psookane@yahoo.com

ABSTRACT

Blood pressure (BP) control, BP reduction and the quality of life (QOL) of hypertensive patients monitored by a pharmacist in three primary care settings in Mahasarakham Province, Thailand were evaluated. Patients were randomly assigned into the treatment and the control groups. The treatment group received their usual care plus the attention of a pharmacist every month to monitor BP and provide pharmaceutical care and counseling. The control group just received their usual care. QOL was measured at the pretest and after six and 12 months. BP was compared between that obtained at the pretest and after 12 months. The results after 12 months from 235 patients, 118 treatment and 117 control, showed that the proportion of BP control was significantly higher in the treatment group, 92 of 118, than in the control group, 76 of 117, $p < 0.05$. BP reduction was significantly greater in the treatment group, 26.72 ± 19.36 for systolic and 13.53 ± 11.21 for diastolic, than in the control group, 12.32 ± 21.55 for systolic and 9.75 ± 11.23 for diastolic, $p < 0.05$. There were significant differences between the groups in physical functioning and role of physical scales. A significant interaction in role emotional scales, and a significant difference between groups after 12 months were noted. Our results indicate that a pharmacist's care of hypertensive patients in the primary care setting can increase BP control, BP reduction and patients' QOL.

Key words: Pharmacist, Hypertension, Pharmaceutical care, Primary care setting

INTRODUCTION

Hypertension remains a major risk factor for cardiovascular disease and is an important health problem in Thailand. The death rate from hypertension and cerebrovascular disease has increased between 1999 and 2003 from 15.6 to 26.8 people per 100,000 of the population and it was ranked third of the major causes of death in 2003 (Health Information Division, Bureau of Health Policy and Plan, 2004). Blood pressure (BP) reduction, especially systolic BP, has been shown to be beneficial in decreasing morbidity and mortality from strokes and coronary events (Klungel et al., 2000; Perry et al., 2000; Staessen et al., 2000, 2001; Blood Pressure Lowering Treatment Trialists' Collaboration, 2003).

Pharmaceutical care is defined as "the responsible provision of drug therapy for the purpose of achieving definite outcomes that improve a patient's quality of life" (Hepler and Strand, 1990). Health related quality of life (HRQOL) is a more specific term with regard to