

# Service Priorities and Programmes Electronic Presentations

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# Psychological Intervention in the Management of Psychosocial Stress and Hypertension in Primary Care

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### **Keywords:**

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#### Introduction

Previous studies have suggested a robust association between psychosocial stress and the development of hypertension. Among the psychological research, depression and anxiety are found to predict the subsequent onset of adult hypertension. Dysregulated dietary intake, increased smoking and alcohol consumption are among the maladaptive emotional copings that exacerbates and maintains the hypertensive state. Stress is also considered to contribute significantly to the physiological arousal of patients with white coat hypertension, patients exhibiting elevated blood pressure (BP) particularly in clinical setting. Earlier research examining the effect of stress reduction approach on hypertension management has shown encouraging results in addition to conventional approach, which includes medication, weight control and exercise. While most of the patients with hypertension in Hong Kong are treated with conventional approach, a stress education group for patients with hypertension was piloted in primary care as part of the self-management of BP.

## **Objectives**

This preliminary service review aims at exploring the effect of stress education group on the management of psychosocial stress and hypertension.

#### Methodology

A total of 143 patients with hypertension were recruited in general out-patient clinics to attend the stress education group. Among the patients recruited, 31 of them were diagnosed with white-coat hypertension. Before attending the group, patients' baseline blood pressure was measured and perceived stress scale (PSS) was administered. The higher the PSS scores means the higher level of perceived stress. The stress education group was conducted by clinical psychology team. Patients were followed up 3-month after attending the group.

# Result

During the 3-month follow up, there is a significant reduction of perceived stress level among all patients with hypertension. Response rate was over 40%. For patients with non-white coat hypertension, the mean on PSS drops from 14.37 (SD=6.86) to 9.04 (SD=6.84). Results from paired t-test shows significant difference t (50)=5.56, p<.001. Patients with white-coat hypertension also show significant reduction of scores on PSS from 15.00 (SD=5.21) to 7.82 (SD=5.42), with t (16)=6.27, p<.001. However, there is no significant difference in the BP level of both groups. BP outcome remains within normal range before and after group. Nonetheless, the current results support the notion that psychological intervention is effective in the stress management for patients in primary care setting. Further research is indicated to examine the role of psychological intervention as an integral part of the holistic care of patients with chronic illness in local context.