



**Service Priorities and Programmes**  
**Electronic Presentations**

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**Innovative Occupational Therapy Programme in NTWC Primary Care Setting for Patient with White-coat Hypertension or Hypertension with White-coat Effect**

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**Introduction**

White-coat hypertension (WCHT) or hypertension (HT) with white-coat effect is commonly encountered in primary care setting with 15-30% prevalence in general population. Ambulatory blood pressure monitoring (ABPM) is a gold standard investigation to confirm the diagnosis. However, therapeutic intervention after ABPM has area for enhancement among General Out-patient Clinic (GOPC).

**Objectives**

After reviewing the service gap and patient need, this innovative programme aims to improve the blood pressure control of patients with WCHT or HT with white-coat effect, reduce their risks of HT and promote better self management for chronic disease.

**Methodology**

109 patients with confirmed or suspected WCHT or HT with white-coat effect were recruited to the programme from GOPCs in NTWC since April 2017. The programme includes two therapeutic group sessions with home programme, one individual follow up consultation at two-month interval, and one six-month follow up group session. The contents include understanding the disease nature, practical tips in blood pressure taking and stress management in clinic, various forms of mind-body relaxation practice, sleep hygiene education, and lifestyle modification. Data on clinic blood pressure, heart rate, general health, anxiety level in clinic, sleep quality and self-efficacy in lifestyle modification were collected at post group training, follow ups at two-month and six-month.

**Result**

Among 72 cases completed two group sessions, the mean clinic systolic blood pressure (SBP) and diastolic blood pressure (DBP) were significantly lowered from 146.6 to 141.2 mmHg and 74.6 to 71.1 mmHg respectively ( $p < 0.05$ ). Among 35 cases completed two-month follow up, the mean clinic SBP and DBP were significantly lowered from 138.7 to 131.7 mmHg and 71.9 to 68.2 mmHg respectively ( $p < 0.05$ ).

Mean anxiety level in clinic was decreased from 6.7 to 5.7 and mean self-efficacy was improved from 5.9 to 6.8 ( $p < 0.05$ ). Sleep quality showed improvement from 5.9 to 6.5 ( $p < 0.05$ ) among 59 cases at post group but no significant change at two-month. 10 cases have completed the six-month follow up, the only significant change was shown in mean clinic DBP from 70.9 to 63.2 mmHg ( $p < 0.05$ ). There was no significant change in general health, heart rate at different point of review.