



## Service Priorities and Programmes Electronic Presentations

**Convention ID:** 408

**Submitting author:** Dr SAU NGA FU

**Post title:** Associate Consultant, Princess Margaret Hospital

### **Interactive Self-Blood Pressure Monitoring Workshops for Patients with Uncontrolled Hypertension in General Outpatient Clinics**

*FU SN (1), DAO MC(1), LUK W(1), HO SFI (1), LAM CHM(1), CHEUNG SK(2), WONG CKH(3), CHEUNG BMY (4)*

*(1)Department of Family Medicine & Primary Care, Kowloon West Cluster*

*(2)Department of Sociology, Hong Kong Shue Yan University*

*(3)Department of Family Medicine & Primary Care, University of Hong Kong*

*(4)Department of Medicine, University of Hong Kong*

#### **Keywords:**

Self Blood Pressure Monitoring

Uncontrolled Hypertension

Quality Improvement

Primary Health Care

#### **Introduction**

International guidelines including the European Society of Hypertension (EHS) and National Institute for Health and Clinical Excellence (NICE) recommended appropriate use of self-blood pressure monitoring (SBPM) in evaluate hypertension (HT) in patients with uncontrolled blood pressure (BP). There were > 100,000 General Outpatient Clinic patients with suboptimal HT control in 2016. Patients often perform inappropriate SBPM using non-validated HBPM devices.

#### **Objectives**

To increase accuracy of HBPM by interactive education workshops, regular assessment of HBPM technique and loaning standard validated SBPM device for home use.

#### **Methodology**

Patients with clinic BP > 140/90mmHg in past 12 months, who were able and willing to perform SBPM were invited to attend one 2 hours workshops with 9 to 12 participants. Their drug compliance was assessed by the Validated 8-item Morisky's Medication Adherence Scale (MMAS-8). Their health literacy was assessed by the Chinese Health Literacy Scale for Chronic Care. The rundown of workshop was (1) 20 minutes lecture of basic HT knowledge and drug information; (2) 15 minutes video demonstration of SBPM procedure; (3) 10 minutes nurse demonstration BP measurement; (4)trial of SBPM device, (5)return demonstration by patients until all 10 steps of SBPM correctly performed. Patients were instructed to record home BP twice daily in the coming 7 days, followed by twice weekly. A standard SBPM record book was issued. Patients were followed up by nurses individually 4-6 weeks later to reassess their SBPM technique and quality of BP records.

## **Result**

151 eligible patients (mean age = 66, age = 29-86, M: F =0.57) attended 15 workshops in 3 clinics. 30% of them had Diabetes while 65.6% of them had hyperlipidemia. 84.1% of them had uncomplicated hypertension. Their MMAS-8 score showed only 41.1% of them had good drug compliance, while 22.5% of them had low drug compliance. 37.1% of them had inadequate health literacy. All of them were able to demonstrate the 10 steps of SBPM immediate after education. 130 (86.1%) patients attended the individual counseling sessions 4-6 weeks later. Their Home BP records and frequency of measurement were adequate. 72% of them continue SBPM, 56% have bought their own HBPM device according to our recommendation. For the 46 participants not yet bought their own device, 91% wanted to continue loaning SBPM device from clinic. 86% of participants demonstrated all correct steps of SBPM. Conclusion: Most patients were willing to continue SBPM. Loaning validate device and structured workshop can promote accurate SBPM.