



## Service Priorities and Programmes Electronic Presentations

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### **Use of spirometry to motivate patient in smoking cessation in General Out Patient Clinics in Kowloon Central Cluster**

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#### **Introduction**

Smoking cessation is important in primary health care service as smoking will increase the risk of developing chronic obstructive pulmonary disease (COPD) and complication of chronic disease such as hypertension, diabetic mellitus, heart disease. During the cessation process, the patient motivation will determine the success of quitting. As one of the motivator is the concern of own health condition, the lung condition assessed by simple spirometry provide more information and thus may increase the motivation of quit.

#### **Objectives**

Increase the patient knowledge in own health status by simple spirometry and then increase the motivation, recruitment and quit rate in SCCP.

#### **Methodology**

In April 2016, the smoking cessation and counselling program (SCCP) in KCC GOPC had been revamped with the workflow for promotion of health. The simple spirometry was used to assess the patient lung condition. Spirometry machine (COPD-6) was selected with the data of FEV1, FEV6, FEV1/FEV6 and estimated lung age detected. This revamp had been pilot in Lee Kee Memorial Dispensary and then expanded to other GOPCs in phases after December 2016. According to SCCP service framework, the patients quit rate was compared retrospectively by using the chi-square test. All smokers attending GOPCs of KCC were invited to attend the SCCP from April 2016 to January 2017. Assessment had been performed including simple spirometry. The spirometry results were explained to patients so that they understand that smoking would worsen their lung condition. Besides, the doctors will be informed for consideration of further detail assessment if  $FEV1/FEV6 < 0.75$  for diagnosing COPD.

#### **Result**

From April 2016 to January 2017, totally 222 patient had attended the SCCP at GOPCs of KCC, among which 53 patients had simple spirometry COPD-6 done on the day of consultation. Among the 169 cases without COPD-6 done, 102 patients

had been quitted in six months and 95 patients quitted in 12 months, with a quit rate of 56.2 % in 12 months. For patients with spirometry done (n=53), 35 cases stopped smoking successfully in 6 and 12 months period, with a quit rate of 66% in 12 months. This quit rate was improved when compare with those patients without COPD-6 assessment.

#### Conclusion and Discussion

The use of simple spirometry may play an important role in enhancing patients self-awareness in their own health status. It enhanced the patient self-motivation and thus increased the recruitment to the SCCP. In addition, our studies showed that it helped improve the quit rate among smokers and served as an important assessment tool for diagnosis of COPD among smokers. The quit rate of those COPD-6 assessment was improved bur not statistically significant that maybe due to the relative small sample size. The progress and effect will be monitor in the future accordingly.