

### **Service Priorities and Programmes**

#### **Electronic Presentations**

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# Prevalence of Undiagnosed Airflow Obstruction (AO) among Patients with History of Smoking in GOPC

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#### **Introduction**

Airflow obstruction is often the first sign, but remain undiagnosed, of chronic obstructive pulmonary disease (COPD) among patients with history of smoking. Early diagnosis of abnormal lung function can facilitate early COPD intervention.

## **Objectives**

To define the prevalence of undiagnosed airflow obstruction (AO) among subjects with history of smoking but no previous diagnosis of chronic lung disease.

#### **Methodology**

Patients: People age  $\geq$  30 with history of smoking attended public outpatient clinics for primary care services Method: Cross-sectional survey in 5 Hong Kong clinics using standard questionnaire and office spirometry

#### **Result**

There were 107 out of 731 subjects with AO, giving a prevalence of 14.4% (95% confidence interval= 11.8%-16.9%). Forty-five subjects with AO performed post-bronchodilator test. Using the Global Initiative for Chronic Obstructive Lung Disease (GOLD) classification of severity of COPD, 27 (60%) of them had mild disease, while 18 (40%) of them had moderate disease. None of them belonged to the severe or very severe category. Majority of subjects with AO had chronic cough, wheezing attack or breathlessness, although most do not present with any acute respiratory symptoms. Diagnosis of AO was associated with the number of year of smoking (OR = 1.044, p = 0.035), being normal or underweight (OR = 1.605, p = 0.046), and negatively with history of hypertension (OR = 0.491, p = 0.003). Conclusion: One-seventh of smokers have undiagnosed AO. Spirometry screening

of smokers should be considered to diagnose AO at early stage, with emphasis on smoking cessation.