Categorisation of Chronic Obstructive Pulmonary Disease (COPD) patients by using a combined assessment method recommended in Global Initiative for Chronic Obstructive Lung Disease (GOLD) 2013 Guideline – A cross sectional study in a General Out-patient CI

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Introduction
COPD is an important health problem and was the third leading cause of death globally in 2012. The updated 2011 GOLD guideline introduced the use of combined assessment of COPD which included assessment of symptoms severity using COPD Assessment Test (CAT) or the Modified Medical Research Council Dyspnoea Scale (mMRC), assessment of airflow limitation using spirometry and assessment of exacerbation risk according to exacerbation history. However, this was not widely adopted in GOPC. There is no published data about the prevalence of different COPD severity categories in primary care in Hong Kong which will be useful for devising the future policy of COPD management by Hospital Authority.

Objectives
(1) To evaluate the prevalence of different COPD severity categories as defined by the GOLD 2013 guideline in a GOPC (2) To describe any differences in the categorization of COPD patients by using CAT versus mMRC. (3) To investigate the adherence of pharmacological treatment to the guideline.

Methodology
This was a cross sectional study carried out in a GOPC. All COPD patients attended the participating clinic from 1st January 2014 to 31st May 2014 were recruited. They would undergo combined assessment following the GOLD 2013 guideline by using validated questionnaires (CAT and mMRC) to assess symptoms severity. COPD
exacerbation history would be obtained with latest spirometry results (within 1 year) documented. The medical records of the participants were reviewed for the pharmacological treatment provided and compared with the recommended management.

**Result**

There were 139 patients recruited during the study period. By comparing CAT and mMRC, the prevalence of patients in different COPD categories were similar with 52.5% vs 51.8% in group A, 24.5% vs 25.2% in group B, 10.8% vs 9.3% in group C and 12.2% vs 13.7% in group D. More than one-fifth of patients was identified at high risk of COPD exacerbation. There was moderate agreement for the GOLD categories by using CAT and mMRC (κ= 0.516) and moderate correlation between CAT score and mMRC scale (ρ=0.572). 23.7% of patients were not receiving the recommended pharmacological treatment.