## Masterclasses

M10.1

## Advances in Chronic Obstructive Pulmonary Disease Management

09:00 Room 423 & 424

Prevention of Chronic Obstructive Pulmonary Disease Exacerbations – International Guidelines and Local Applicability

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Chronic obstructive pulmonary disease (COPD) is a common disease worldwide with significant morbidity and mortality, and incurs an intensive expenditure of healthcare resources. Acute exacerbations of COPD (AECOPD) are defined by the Global Obstructive Lung Disease (GOLD) guideline as an acute worsening of respiratory symptoms that result in additional therapy.1 The GOLD guideline has provided a good resource for management and prevention of exacerbations. Infection and air pollution are some of the important causes of AECOPD.2, 3 According to the Hospital Authority statistical report 2015-2016, a total of 26,329 inpatient COPD-related discharges and deaths were recorded with 1,373 deaths.

While smoking cessation is the most important and effective intervention, other non-pharmacological interventions including disease-specific self-management, pulmonary rehabilitation, early medical follow-up, home visits by respiratory health workers, integrated programmes and telehealth-assisted hospital at home have been studied during hospitalisation and shortly after discharge in patients who have had a recent AECOPD.4 A local study on pulmonary rehabilitation programme for eight weeks for patients shortly after an exacerbation were able to lead to improvement in quality of life up to six months, but did not reduce health-care utilisation at one year.5 A randomised controlled trial in Hong Kong comparing comprehensive COPD programme versus usual care found that comprehensive COPD programme could reduce hospital readmissions for COPD and length of stay, in addition to improving symptoms and quality of life of patients.6

Pharmacological approaches to reduce the risk of future exacerbations include long-acting bronchodilators, inhaled steroids, mucolytics, vaccinations and long-term macrolides. Early treatment of long-acting anti-cholinergic agents for mild COPD may also help to decrease exacerbations.7,8

Further studies are needed to assess the cost-effectiveness of these interventions in preventing AECOPD.