Integrated Chronic Disease Clinic "A New Multidisciplinary Model of Care for Patients with Chronic Respiratory Diseases in Primary Care Setting"

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Keywords:
Chronic Respiratory Diseases
Multidisciplinary Approach
Primary Care
Chronic Disease Management

Introduction
Primary care clinics can offer early diagnosis and treatment of chronic respiratory diseases, such as chronic obstructive pulmonary disease (COPD) or asthma in order to improve patient outcomes. A pilot clinic, the Integrated Chronic Disease Clinic (ICDC), was established since February 2016 in accordance to the principles of family medicine by providing holistic, comprehensive, continuous, coordinated and preventive care using a multidisciplinary approach with the input from nurses, physiotherapists and dietitians. Other comorbidities, such as diabetes and hypertension, were also being managed during the same session.

Objectives
(1) To provide accurate diagnosis of respiratory diseases and COPD staging
(2) To reduce asthmatic or COPD exacerbation
(3) To increase the uptake rate of pneumococcal and flu vaccination
(4) To enhance the smoking cessation service with physicians’ input

Methodology
We recruited GOPC patients with physicians’ diagnosis of COPD or asthma without recent spirometry test, those with chronic respiratory symptoms or those with abnormal spirometry results. Diagnosis and management were based on the latest GOLD/GINA guideline. They were referred for spirometry, inhaler technique assessment, exercise program and dietetic advice where appropriate. Patient outcomes were analyzed by retrospective review of case records and all relevant investigation results.

Result
136 patients were recruited into this clinic with male predominance (ratio 2.2:1). The mean age was 68.7 years (SD 14.8) and mean number of other comorbidities was 1.9 (SD 1.5). The final diagnoses of these patients were COPD (55%), asthma (25%) and others (20%). There was one case of carcinoma of lung being diagnosed. 92.8% of COPD patients were staged according to GOLD guideline: 31% category A, 41% category B, 9% category C and 19% category D. Most patient had CXR (97.8%) and spirometry (93.3%) done within 1 year. Five (3.7%) patients attended AED due to exacerbation and ten (7.4%) patients attended GOPC for management. 90% of eligible patients received pneumococcal vaccine and 87% received flu vaccine this year. 20% of smokers (7 out of 35) successfully quitted smoking. Nine (6.6%) patients were referred to Medical department for further management due to severe or unexplained symptoms.

This new pilot clinic model of care offered promising results in the first year. Further evaluations could be done to assess the feasibility to implement this model in other GOPCs.