



Impact of adherence to GOLD guidelines on 6-minute walk distance, MRC dyspnea scale score, lung function decline, quality of life, and quality-adjusted life years in a Shanghai suburb

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ABSTRACT. We performed a 1-year cluster-randomized field trial to assess the effect of standardized management of chronic obstructive

pulmonary disease (COPD) on lung function and quality of life (QOL) measures in patients in China. We used the Global Initiative for Chronic Obstructive Lung Disease (GOLD) treatment guidelines and assessed indexes including pulmonary function, QOL, quality-adjusted life years (QALY), Medical Research Council (MRC) dyspnea scale, 6-min walk distance (6-MWD), number of emergency visits, and frequency of hospitalization. Of a total of 711 patients with chronic cough and asthma, 132 were diagnosed as having COPD and 102 participated in this study [intervention group (N = 47); control group (N = 55)]. We found that adherence to GOLD guidelines had a perceivable impact on 6-MWD, MRC dyspnea scale score, and QOL. The average QALY increased by 1.42/person/year in the intervention group, but declined by 0.95/person/year in the control group. We conclude that standardized management improves disease severity, QOL, and QALY in COPD patients when treatment protocols adhere to GOLD guidelines.

Key words: Chronic obstructive pulmonary disease; Cost effectiveness; General practitioner; Quality of life; Quality-adjusted life years