



Service Priorities and Programmes
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TKOH Home Oxygen and Mastery of Exercise (HOME) program for Improving Clinical Outcomes and Reducing Hospital Readmission of Chronic Obstructive Pulmonary Disease (COPD) Patients

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Introduction

According to World Health Organization, COPD is the fifth leading cause of death in 2002 and become the third leading cause of death in 2030. Home oxygen therapy is a widely used treatment that improves survival in COPD with severe hypoxaemia. TKOH HOME program was established to provide prompt Community Physiotherapy service for COPD patients who newly started using home oxygen or required further titration after acute exacerbation.

Objectives

1.To promote home oxygen compliance & safety 2.To improve patient's exercise capacity and health status 3.To reduce the risk of hospital readmissions

Methodology

-To assess and titrate home oxygen requirement preliminarily in inpatient or outpatient settings. -Discuss with Respiratory Physician about patients' condition and arrange home oxygen prescription. -Offer community physiotherapy services to further titrate oxygen dosage in home environment and empower patients about oxygen therapy usage and formulate individualized exercise program.

Result

Between August 2012 and August 2013, total ten COPD patients were referred for HOME program. Average 2-3 community physiotherapy visits were offered and 50% of patients required further home oxygen titration. Based on the telephone interview at 6 month after HOME program, 75% of patients continued home oxygen therapy and 50% of patients used portable oxygen during outdoor activities which was comparable with the reported oxygen therapy adherence rate (45 to 70%) [Stamatis Katsenos et al 2011] With HOME program, patient's mean 6 minutes walk test distance increased for 14% (113m to 131m) with the reported perceived dyspnoea (RPD) decreased from 4.0 to 2.6. The Modified Medical Research Council Dyspnoea (mMRC) Scale

decreased from 3.7 to 3 and this reflected more patients were able to leave their home. The patient reported health status also improved and the COPD assessment test (CAT) score decreased from 18 to 13. The unplanned hospital readmission rate of COPD patients receiving HOME program were 12.5% which was much lowered than the local reported COPD readmission rate (24.2%) [Frank WK Chan et al 2011]. Conclusion: Home Oxygen and Mastery of Exercise (HOME) program could improve patient's outcomes and reduce the risk of hospital readmission.