Chronic Obstructive Pulmonary Disease SIG 3 Poster Presentations



PREDICTORS FOR ADHERENCE TO ACTION PLANS FOR SELF-TREATMENT OF COPD EXACERBATIONS

LENFERINK A $^{1,2},$ VAN DER PALEN J $^{1,2},$ WANG X 1, VAN DER VALK P 1, EFFING T 3,4

¹Department of Pulmonary Medicine, Medisch Spectrum Twente, Enschede, The Netherlands, ²Department of Research Methodology, Measurement, and Data-Analysis, Faculty of Behavioural, Management and Social sciences, University of Twente, Enschede, The Netherlands, ³ Department of Respiratory Medicine, Repatriation General Hospital, Adelaide, Australia, ⁴ School of Medicine, Flinders University, Adelaide, Australia

Introduction/Aim: A minority of patients with chronic obstructive pulmonary disease (COPD) derives benefit from self-management interventions that include action plans for self-treatment of COPD exacerbations. The aim of this study was to identify predictors for adherence to action plans for self-treatment of exacerbations in COPD patients.

Methods: Self-reported diary data from a subset of COPD patients who participated in a randomized controlled trial (COPE-II study) in the Netherlands was used to assess adherence to COPD action plans within a self-management intervention. Only patients with exacerbations were included. Successful self-treatment was defined as self-initiating a course of oral steroids/antibiotics within 2 days from the start of an exacerbation. A patient was defined as being adherent when in \geq 75% of all exacerbations the self-treatment action plan was followed. Patient-level factors that showed a univariate association (P < 0.10) with adherence were included in a multivariate logistic regression model to identify the predictors for adherence to COPD self-treatment action plans (P < 0.05).

Results: Data from 66 patients (mean age 63.6 ± 8.0 ; men 56.1%) showed 387 exacerbations within 2 years of follow-up. Adherence to the action plans was observed in 37.9% of the patients and in 216 COPD exacerbations. Multivariate logistic regression analyses showed that being male (OR: 5.1; 95% CI: 1.5–17.3) and having no walking problems (EQ5D mobility, OR: 4.9; 95% CI: 1.5–16.4) were positively associated with being adherent to the action plan for self-treatment of COPD exacerbations.

Conclusion: Our study results indicate that being male and having no walking problems are predictors for better adherence to COPD exacerbation action plans. This implies that exploring patients' mobility and offering more support to female COPD patients who are less mobile may positively influence the adherence to COPD exacerbation self-treatment action plans. More research is, however, required to confirm this.

Grant Support: Lung Foundation Netherlands (grant number 3.4.02.12 and 3.4.11.061)

TP 099

IMPAIRED SLEEP QUALITY IS A KEY SYMPTOM AT COPD EXACERBATION AND IS PERPETUATED DURING HOSPITALIZATION

DALGLEISH G, MACDONALD M, KING P, HAMILTON G, BARDIN P Monash Lung and Sleep, Monash Health

Introduction/Aim: Chronic obstructive pulmonary disease patients commonly experience poor sleep quality. Although sleep quality is recognized as a key domain of disease impact in the COPD Assessment Tool (CAT) there is minimal research investigating the interaction between impaired sleep and exacerbation. We prospectively evaluated sleep quality in hospitalized COPD exacerbations.

Methods: Patients admitted to the Respiratory High Dependency Unit with COPD exacerbations, underwent objective sleep assessment using Sensewear Pro3 actigraphy armbands. Evaluation of preadmission sleep quality and disease impact was evaluated using the Pittsburgh Sleep quality index (PSQI) and CAT.

Results: Baseline sleep quality was poor. The mean(SD) PSQI score was 33.1 ± 5.7 (SD) with poor sleep initiation and sleep maintenance reported. Hypnotic mediations were used in the community every night by 20% but on an as required basis by 70%. At the time of exacerbation 82% of patients reported significant sleep disturbance on CAT score, and this scored higher than cough, wheeze or chest tightness.

50% of patients made the decision to call an ambulance overnight and 70% reported reduced sleep duration preadmission. At admission, 20% reported that it had been over 24 h since they had last slept.

During inpatient HDU stay, actigraphy recorded an average of 3.02 ± 2.12 (SD) hours sleep per night. Over half of patients reported not having any subjectively good quality sleep in hospital.

Conclusion: During COPD exacerbations sleep quality is poor. Impaired sleep may be a more prevalent symptom in COPD exacerbation than traditional chest symptoms. Ongoing recruitment is required to determine if significant relationships exist between sleep quality and COPD exacerbations.



UNDER-UTILISATION OF COPD MANAGEMENT GUIDELINES IN AUSTRALIAN GENERAL PRACTICE

BEREZNICKI B, WALTERS H, WALTERS J, PETERSON G, BEREZNICKI L University of Tasmania

Introduction/Aim: Approximately 1.45 million Australians are estimated to have chronic obstructive pulmonary disease (COPD), although half of these people do not have a doctor's diagnosis. Under-diagnosis and under-treatment contribute to the burden of human misery and healthcare costs. The aim of this study was to gain insight into the diagnosis and early management practices of COPD among Australian general practitioners (GPs), and highlight any problem areas and management gaps for future intervention.

Methods: One thousand GPs in Australia were invited to take part in a postal survey, which collected demographics and practice details, familiarity with contemporary practice guidelines, method of diagnosis of COPD, use of lung function tests, treatment preferences, advice offered and patient follow-up.

Results: Two hundred and thirty-three GPs responded and were eligible for inclusion (23.3% response rate). While 83.7% of GPs indicated that they base a diagnosis of COPD according to guideline recommendations, 60.1% of respondents indicated that they delay the diagnosis. Inhaled bronchodilators were the preferred treatment in initial management of COPD by approximately 90% of GPs; however, only 27.5% indicated that they routinely recommend pulmonary rehabilitation. GPs indicated that they routinely record patients' smoking status and offer smoking cessation advice, but the timing of this advice varied. Less than half of the respondents indicated that they routinely were familiar with tools and resources provided by the Australian Lung Foundation.

Conclusion: There is considerable scope for improvement in GPs' use of and familiarity with COPD management guidelines, tools and resources. Compilation and dissemination of guidelines and focused education on some areas in need of improvement (such as delayed diagnosis, delayed smoking cessation advice and underutilization of pulmonary rehabilitation) are important strategies for improving patient outcomes in COPD.

Grant Support: Funded by the Faculty of Health's strategic seed funding scheme (University of Tasmania).