spectively). 63% of respiratory patients never spoke about their sexuality with a health professional. 60% would like the health professional to begin to talk about their sexuality. 36% of patients spoke about it with a professional. In this group, 94% of patients told the professional about their sexual activity on their own initiative.

Conclusion: More than one of two chronic respiratory disease patients (77%) participating in a rehabilitation program want sexuality to be taken into consideration during their program.

Fatigability of Lower Limb Muscles during Walking in Chronic Obstructive Pulmonary Disease

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Background: Patients with chronic obstructive pulmonary disease (COPD) perceive much less quadriceps fatigue during walking compare to cycling. Whether other lower limb muscles could develop fatigue during walking is unknown. The purpose of this study was to assess the electrical activity of five lower limb muscles during a 6-minute walking test in 11 healthy subjects and in 10 patients with COPD matched for age and activity level.

Methods: Surface electromyographic (EMG) data were recorded in five muscle groups (soleus, gastrocnemius (GM), tibialis anterior, vastus lateralis and rectus femoris) of the right leg during the walking test. The EMG median frequency of all contractions at minute 2 and 6 were averaged for each muscle group. Ventilation, oxygen consumption and CO₂ production were also continuously measured throughout the test.

Results: Although the walking distance (494 ± 116 vs. 625 ± 50 m; $P < 0.01$) and the walking speed (1.7 ± 0.4 vs. 2.1 ± 1.2 m·s⁻¹; $P < 0.01$) were reduced in COPD compared with controls, patients worked at a higher percentage of their estimated maximum voluntary ventilation during the test (118 ± 32 % vs. 51 ± 14 %; $P < 0.01$). The time course of the EMG median frequency from minute 2 to 6 differed between patients with COPD and healthy controls for the soleus, GM and tibialis anterior suggesting the occurrence of a muscle fatiguing profile in COPD.

Conclusions: Evidences of a fatiguing profile was found in three lower limb muscle groups during walking in COPD despite a slower walking speed compared to healthy controls.

Pulmonary Rehabilitation Results in Significant Effect on Physical Outcomes: Preliminary Data from the Saint John Regional Hospital, New Brunswick, Canada

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Background: Current guidelines claim that pulmonary rehabilitation is a cost effective method for increasing exercise tolerance, decreasing hospitalization, and improving knowledge and quality of life in patients with chronic obstructive pulmonary disease. The purpose of the present study was to examine the changes in physical and psychological outcomes during and after completion of a pulmonary program.

Methods: Between September 2004 and April 2006, 27 patients attended pulmonary rehabilitation. All patients were referred by a Respiriologist and had moderate to severe respiratory impairment on pulmonary function testing. They attended 3 supervised exercise sessions per week for 10 weeks under the supervision of a nurse and physiotherapist. Education modules were provided by the physiotherapist and respiratory therapist to increase knowledge and independence with disease

management. Data was collected pre and post program, and at 3 month and 6 month follow up visits. There were 16 patients (59.3%) who had complete data and attended all follow-up appointments. Outcomes included the six minute walk test (6MWT) and chronic respiratory questionnaire (CRQ). Follow up visits also assessed exercise adherence and readmissions for respiratory problems.

Results: Repeated measures analysis of variance showed improvement in 6MWT and average metabolic equivalent (MET) from pre to post program ($P < .05$) which remained stable up to 6 months follow-up. The same analysis did not show improvement for any of the variables measured in the CRQ. Exercise routine, as reported by patients at 6 months, was 4.7 days per week for 28 minutes per session. Readmissions for pulmonary problems were reported by 3 patients, 2 at the 3 month assessment and 1 at the 6 month.

Conclusions: Preliminary program results show improvement in physical outcomes and impressive exercise adherence at 6 months follow-up. The small sample size is an obvious limitation, but being an ongoing program, future data will reveal if these initial findings persist.

A Model Applied to a Real Life Situation: Self-Management with a Written Action Plan for Early Treatment of COPD Exacerbations

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Background: We hypothesized that self-management education with the use of a written action plan provided by a nurse case manager can help patients to gain the proper skills to start an early treatment for an acute exacerbation.

Methods: COPD patients from an outpatient clinic with access to a written action plan and self-administered prescription were instructed to initiate

their antibiotics and/or prednisone in case of exacerbation, and call their nurse case manager for supervision. The following data was collected: symptoms change, patients delay in taking action to treat their exacerbations (starting antibiotics and prednisone, calling the case manager) and use of hospital services.

Results: We report on 187 exacerbations occurring in a cohort of 113 moderate / severe COPD patients with FEV₁ of $37 \pm 16\%$ predicted (mean $\pm$ SD). 161 exacerbations were supervised by the case manager at the time of the event. The remaining 26 exacerbations were detected after the event. 87% of the supervised exacerbations presented with 2 major symptoms (increased dyspnea, increased sputum volume and/or purulent sputum). Patient's delay to initiate treatment in supervised exacerbations was 2.04 ± 1.8 days; 85% took action to treat the exacerbation within 3 days. The treatment for supervised and unsupervised exacerbations was similar (slightly more antibiotics and prednisone were used for unsupervised ones) and they had similarly favourable outcomes in terms of health services use, with 68.5% of the exacerbations not requiring any hospital services.

Conclusions: Patients can take an active role, acquire the skills to recognize exacerbation symptoms and start an early treatment of antibiotics and prednisone according to the directives of their written action plan.