116. Exacerbations and severe chronic respiratory disease: oxygen, rehabilitation, admission to hospital and palliative care

P1237

Late-breaking abstract: Effects of mucus clearance on the differences of rheological property, driving pressure and frequency during high frequency chest wall oscillation (HFCWO)

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Background: HFCWO is commonly used for airway clearance. However the effect of mucus clearance on the rheological property, driving pressure and frequency during HFCWO is not clear. The purpose of this study is to clarify differences of airway clearance efficacy.

Method: 24 normal subjects participated in the study 1. Mucus stimulants (MS) were prepared using thickener 1, 2, 3 and 4% and the pressure controls of SmartVest™ were driven 20, 40 and 60 on the frequency 13Hz. MS rheological studied were measured using Rheometer. They were quiet breathing into the endotracheal tubes having internal diameter of 7mm during SmartVestTM. We measured migration velocity of each MS, PEFR, PEmax and effortless breathing. Another 26 normal subjects participated in the study 2. MS were prepared using similar thickener were driven frequency 9Hz, 13Hz and 17Hz on the driving pressure 40. Measurement methods and items were carried out in a similar manner of Study 1. Results: The higher setting pressure and frequency controls droved, the more PEFR and PEmax increased (p<0.05). In the rheology of MS, the lower viscoelasticity of 1% MS had, the faster clearance velocity moved (p<0.05). However, the clearance velocity did not increase in the higher viscoelasticity of MS in spite of high driving pressure. The 13Hz oscillation was most reduced in viscoelasticity and yield value by comparison with 9Hz and 17Hz. The lower viscoelasticity of MS in the each frequency, the clearance velocity increased (p<0.05). The subjects were not tolerable on17Hz.

Conclusions: The oscillation of 13Hz and driving pressure 40 is the most effective for mucus clearance.

P1238

Assessment of nocturnal hypoventilation in patients with chronic respiratory failure: Role of transcutaneous PCO2 monitoring. An observational study Danièle Nguyen-Baranoff, Claudio Rabec, Marjolaine Georges, Ameline Vagner, Ntumba Kabeya, Philippe Camus. Service de Pneumologie et Réanimation Respiratoire, Centre Hospitalier et Universitaire de Dijon, Dijon, France

Patients with nocturnal hypoventilation are at risk of developing daytime ventilatory failure. As a result, this finding has therapeutical implications. Currently, assessment of nocturnal hypoventilation is performed using nocturnal oximetry (NO) coupled to diurnal arterial blood gases (ABG). Even if theoretically useful, transcutaneous PCO2 (TcPCO2) monitoring is not routinely used. Therefore, its role should be defined.

Objectives: To compare NO coupled to ABG versus TcPCO2 for detecting alveolar hypoventilation in a cohort of chronic respiratory failure patients.

Methods: We performed 153 NO coupled to a TcPCO2 recording (91 under non invasive ventilation and 62 during spontaneous breathing) in 98 patients. In addition, ABG were performed during spontaneous breathing. Aetiologies of respiratory failure were: neuromuscular disorder (97 traces), thoracic cage abnormalities (35 traces) and lung disease (21 traces). Nocturnal hypercapnia was defined by a nightime mean PtcCO2 \geq 50 mmHg, nocturnal hypoxemia as \geq 30% of the night spent with a SaO2 <90% and diurnal hypercapnia as a PaCO2 >45 mmHg.

Results: Combined normal NO and normal ABG underestimated nocturnal hypercapnia in >50% of both spontaneously breathing and ventilated patients. Conversely, nocturnal hypoxemia was associated with nocturnal hypoventilation in 100% of non ventilated patients but only in 50% of ventilated ones.

Conclusion: Normal values of nocturnal oximetry and/or ABG do not allow to exclude nocturnal hypoventilation. Our results underline the interest of performing nocturnal TcPCO2 monitoring to evaluate patients at risk of nocturnal hypoventilation.

P1239

Evaluation of home oxygen provision in east London: A study of appropriateness of ordering; and patient understanding and compliance Robin Johns¹, Marc Rodriguera², Kara Renno², Simon Lloyd-Owen¹. ¹Respiratory Medicine, Barts and the London NHS Trust, London, United Kingdom; ²Community Respiratory Team, Tower Hamlets Community Health Service. London. United Kingdom

Introduction: In the UK, commissioners fund home oxygen via a tariff based on flow rate, hours of prescribed usage, and mode of delivery; each specified on an oxygen order form (HOOF).

Aims: Over six months, records from the local supplier (Air Products) showed 130 patients were under-using oxygen by at least 75% of that ordered. This study aimed to evaluate why.

Methods: Diagnoses and reasons for oxygen provision were obtained from electronic records. Patients were telephoned to explore understanding of the need for oxygen, health benefits, and their individual order. Some were deceased (11), were children, or were not contactable. Data on contactable adults, who agreed to interview (45), are presented.

Results: Commonest reasons for oxygen provision were COPD and obesity hypoventilation/obstructive sleep apnoea. 47% (21/45) could not name their oxygen-requiring condition. 27% (12/45) were unaware of beneficial effects. 22% (10/45) were unaware how much they were supposed to use. In 63% (22/35), recollection of their oxygen order did not tally with HOOF data. 60% (27/45) admitted to using less than instructed to. Commonest reasons were that it felt unnecessary and intrusive. Most (64%: 29/45) would use more if advised to do so, but 51%: (23/45) would be unhappy for oxygen to be removed if advised it became unnecessary.

Discussion: To ensure the NHS pays for only oxygen that is used, suppliers must be notified of changing patient cirumstances and requirements. Verbal instructions during clinic attendances must be accompanied by a faxed new order (HOOF). Improved education should empower patients and translate into a reduction in oxygen underusage.

P1240

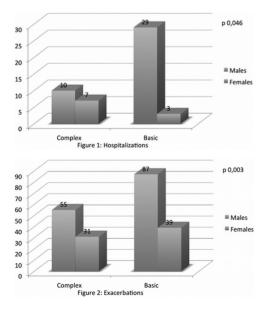
A highly complex home care service for COPD in LTOT may reduce the exacerbations and the hospitalizations

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Background: In Italy, the management of patients treated at home with oxygen is done with different degrees of complexity: from a basic model that provides only home delivery of oxygen to a complex model that also provides further services. **Aims:** The aim of this prospective study is to confirm whether a LTOT implemented with additional services, may reduce the number and length of the hospitalizations and the number of the exacerbations.

Methods: 98 patients with COPD in CRF, candidate to LTOT, were enrolled and randomized in two arms (48 basic and 48 complex). The "complex" arm was treated by a high profile service and the "complex" arm solely by home oxygen delivery. All patients were followed for a period of eighteen months.

Results: The patients treated with complex profile service had a lower number of hospitalizations, shorter length of the hospitalizations and reduced number of exacerbations.



Conclusions: This study confirms the hypotesis that a LTOT "complex" service, may have greater effectiveness than a "complex", in reducing the exacerbations rate, the number and the length of the hospitalizations of the COPD patients.

P1241

End of life in COPD: There may be no surprises!

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Background: In the UK prognostic indicators have been developed for predicting end of life (EOL) in COPD.

We report on the prevalence of these indicators in patients admitted to a nurse led unit for people with acute exacerbations of COPD (AECOPD).

Methods: Data on general and COPD specific prognostic indicators plus the surprise question were collected on all admissions Aug 2010 to Jan 2011. **Results:** Total 199 patients (54%F). Mean age 70 (37-93)

In 96 (48%) cases the clinician would not have been surprised if the patient died in the next 6-12 months. In only 5 of these instances were no other prognostic indicators identified (positive predictive value of negative response 95%) 174 (87%) had at least 1 prognostic indicator identified at the time of admission.

Prognostic indicators and surprise question

Prognostic Indicator	Surprise Q "No" (n=96) N (%)	Surprise Q "Yes" (n=103) No (%) 43 (42)	
Co-morbidities (IHD/HF/DM)	45 (47)		
Wt Loss >10% over 6 months)	9 (9)	2 (2)	
BMI <19	17 (18)	7 (7)	
Albumin <25 g/dl	0	0	
Karnofsky <50	9 (9)	1(1)	
>3 admissions in 12 mths	35 (37)	8 (8)	
LTOT	24 (25)	6 (6)	
MRC 5	44 (46)	16 (16)	
FEV1 <30% pred	33 (34)	31 (31)	
Right Heart Failure	13 (14)	4 (4)	
NIV/ ICU	28 (29)	9 (9)	
Sputum MRSA or Pseudomonas	12 (13)	7 (7)	
>6 courses of steroid in 12 mths	19 (20)	13 (13)	
HAD Depression >11	26 (27)	23 (23)	

Of the 15 deaths so far there was a negative response to the surprise question in 14 and in all at least 1 other prognostic indicator was present.

Conclusions: Prognostic indicators were present in 87% of patients admitted.

The surprise question should form part of admission assessment. It is too early to say which prognostic indicators are important in predicting EOL.

P1242

Are COPD patients referred to palliative care?

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Introduction: The consultation on a strategy for COPD in England suggests patients with COPD should be considered for end of life care particularly if they have the following markers of severity: 1. Severe airflow obstruction (FEV1 < 30%) 2. Low BMI (<20) 3. Housebound 4. Two or more admissions in previous year 5. Respiratory failure or previous ventilation.

Method: A list of patients discharged in Jan 2007 with a diagnosis of COPD was obtained. Of 69 patients identified 40 were chosen at random and included. The case notes were investigated and the markers of severity met were recorded. It was also determined if the patients had survived to discharge, 3 months and 3 years. **Results:**

No. of markers of severity met	Patients	Died during admission	Survived to discharge	Alive at 3 months	Alive at 3 years
0	8	2 (25%)	6 (75%)	5 (63%)	4 (50%)
1	12	1 (8%)	11 (92%)	10 (83%)	6 (50%)
2	10	4 (40%)	6 (60%)	5 (50%)	3 (30%)
3	9	5 (55%)	4 (44%)	2 (22%)	1 (11%)
4	1				1 (100%)
5	0				

Discussion: None of the patients had all 5 criteria measured during, or prior to the admission in question illustrating the importance of thoroughly assessing level of disability in COPD. When considering the patients alive at 3 years there was a trend towards fewer patients surviving the greater the number of severity criteria they met. However the patient who met 4 of the severity criteria, and survived to 3 years demonstrates the difficulty in precisely predicting the transition to the end of life in COPD and thus timing of involvement of palliative care. Only 3 of the 40 patients were considered for specialist palliative care, and this consisted of using

the Liverpool care pathway in the hours prior to death. More studies are needed to look into optimal timing for end of life care in COPD.

P1243

Readmission predictors in patients with chronic obstructive pulmonary

disease hospitalized for an exacerbation Naoyuki Yoshida¹, Takashi Yoshiyama², Satoshi Kojima³, Misako Aoki¹, Shoji Kudo². ¹Respiratory Care and Rehabilitation Center, Fukujuji Hospital, Japan Anti-Tuberculosis Association, Kiyose-shi, Tokyo, Japan; ²Respiratory Diseases Center, Fukujuji Hospital, Japan Anti-Tuberculosis Association, Kiyose-shi, Tokyo, Japan; ³Clinical Laboratory Department, Fukujuji Hospital, Japan Anti-Tuberculosis Association, Kiyose-shi, Tokyo, Japan

Introduction: Hospitalizations for chronic obstructive pulmonary disease (COPD) exacerbations increase risk of readmission due to an exacerbation and lead to higher mortality.

Aims: To determine factors which may contribute to readmission due to a new episode of COPD exacerbation.

Methods: We reviewed medical charts of all patients with a discharge diagnosis of a COPD exacerbation admitted to Fukujuji hospital, the secondary respiratory hospital serving the north-west of Tokyo, from October 2008 to March 2010. Data collected included age, sex, pack-year history of smoking, body mass index (BMI), previous FEV1, arterial blood gases at an emergency room, and incidence of long term oxygen therapy (LTOT). Comorbidities were measured with Charlson Comorbidity Index. Length of stay at this time as well as the number of hospitalizations for a COPD exacerbation in the previous 12 months were obtained. Readmission was defined as one or more hospitalization for an exacerbation within six months after discharge.

Results: 66 patients (57 men) were included in this study (mean FEV1 38.4% predicted). 19 of these patients (28.8%) were readmitted. Readmission was significantly associated with receiving LTOT (odds ratio [OR], 3.63 [95%CI, 1.18 to 11.2]; p=0.04), hospitalizations for a COPD exacerbation in the previous 12 months (OR, 20.2 [CI, 4.58 to 88.8]; p<0.001), and Charlson Comorbidity Index (>1 vs 0 or 1) (OR, 7.56 [CI, 2.08 to 27.53]; p=0.003).

Conclusions: Receiving LTOT, hospitalizations during the previous year, and comorbidities are strong predictors of readmission due to a new episode of exacerbation in our COPD patients.

P1244

A time-limited, six month program of community-based disease management, support and education following hospital admission for AECOPD: Outcomes from a pilot study

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Introduction: Our specialist multidisciplinary respiratory team (MDRT) can successfully support COPD patients following AECOPD admission (>1000 bed-days saved/year). Patient-dependency has made discharge difficult. The aim of this pilot was to determine the efficacy/suitability of a time-limited (6/12) support program, focused on self-management.

Method: Patients admitted with AECOPD >2/year or first time with no previous diagnosis/education, were referred. Disease severity, anxiety/depression and admission frequency (year before/year after) were documented. A pre-determined program of self-management skills was assessed by the Bristol Questionaire (BQ). **Results:** 23 COPD patients, (mean (\pm SD) age 73.3 \pm 0.02 years; FEV₁ 0.79 \pm 0.07; MRCDS 4.1±0.1) were under MDRT for 6.4±0.9 months (mean±SE). 11/23 were discharged appropriately; 2 died; 8/23 required ongoing support. There was no significant difference in disease severity or HADS between those discharged and those requiring ongoing support. Admission rate significantly (p<0.02) decreased from 1.9±0.2/patient in 12/12 prior to MDRT to 1.2±0.3/patient in 12/12 after team input, in both groups with no significant difference in final BQ (39.3±3.9, n=14) scores.

Conclusion: A time-limited program focused on self management is appropriate for about 50% patients admitted with severe COPD. Further work needs to be done to determine specific factors that can predict which patients are suitable for this intervention.

P1245

Evaluation of contribution of high frequency chest wall oscillation treatment to medical treatment in patients with acute exacerbations of COPD

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Vest TM device which applies high frequency chest wall oscillation has been approved by FDA for the clearance of bronchial secretions in 1988 and for the induction of sputum in 2000. It has been used in abroad but not in Turkey yet. In this study, we aimed to investigate the contribution of VestTM device to the conventional treatment in COPD exacerbations.

Thirty stage 3-4 (GOLD) COPD patients with acute exacerbation were included in the study. Patients were randomized as group I; standard treatment and group II;

standard treatment + Vest TM (20 minutes,3 times a day for 5 days). Basal, third and fifth day BODE index, arterial blood gas of the patients were evaluated. VestTM device was applied to 16 of 30 patients.Basal BODE index of the study groups was not statistically different, also mean age was similar. BODE index, PO2 and SO2 of the patients were statistically better both on the third and fifth days (Table). There was a 4% increase from basal FEV1 of GroupI, while this difference was 6% in GroupII (p=0.002,p=0.002), similarly the increase in 6MWT was 107m in Group I while it was 150m in VestTM group (p=0.000, p=0.000). Although

MMRC dyspnea scale did not statistically different, the VestTM group reported decreased dyspnea perception (p=0.055). BODE index (p=0.801, p=0.595) and SpO2 (p=0.640, p=0.870) were not found different between the two groups. Adding Vest TM to conventional treatment in COPD exacerbations did not result in any difference in BODE index, however exercise capacity and dyspnea perception

were found to be improved more with Vest TM.

P1246

Hospital at home for patients with acute exacerbations of chronic obstructive pulmonary disease; will it be an effective home care model?

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The current acute care model for COPD is, in general, insufficient for optimal management of the disease.Coordination of services is especially important at the time of the COPD exacerbation, which is characterised by high morbidity, high healthcare utilisation and even worse fragmentation of care. Home care services can offer a great potential for this aim. Hospital-at-home (HAH) care model is feasible, safe, and efficacious for certain patients with selected acute medical illnesses who require acute hospital-level care.

Aim: The aim of the present study was to analyze the effectiveness of HAH for patients with COPD exacerbation.

Methods: Two hundered and six patients who were admitted to our institution via the emergency department with the diagnosis of COPD exacerbation were included to HAH. Patients were followed up during the year after HAH practise. Hospitalization rates, emergency department, out patient clinic admissions, and hospitalisation days when needed were evaluated before and after one year period of HAH.

Results: After one year follow up period of HAH practise hospitalisation rates, emergency department and out patient clinic addmitions, length of hospital stay were decreased. Respectively 40.29% 21.18%, 54.94% and 46.35%. The decreases for all parametres were found statistical significant (p<0.01).

Conclusion: We conclude that integrated care services including home care using the HAH modalities are strongly needed to enhance both health and managerial outcomes. Clinicians should consider this form of management, especially as there is increasing pressure for inpatient beds in Turkey.

P1247

Hand grip strength in patients engaged in pulmonary rehabilitation program during COPD exacerbation

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Aims: To measure hand grip strengths and investigate related factors in COPD patients engaged in pulmonary rehabilitation program during exacerbation. Material and methods: Grip strengths of both hands were measured using vigorimetry in 52 COPD patients.

Results: Mean hand grip strength were 0.41 ± 0.14 bar. Patients were divided into two groups according to a cut-off point, 0.40 bar (54% \leq 0.40, 46% >0.40), there was no significant difference in age, systemic diseases, FEV1/FVC, arterial blood gases between groups. Hand grip strengths were lower in women (p=0.003). In patients with lower strength, FEV1, FVC values (p=0.019 and p=0.002, respectively), hemoglobin levels, mini-nutritional scores and T scores at femoral neck were lower than that of patients with higher strength (p<0.05). The difference in 6 minute walk distance was not significant (p=0.087). However patients in the lower strength group had higher fatigue levels (p=0.039) and higher rest number during the walk test (p=0.032).

There was a moderate positive correlation between grip strength and 6-minute walk distance (r=0.511, p=0.001). There were negative correlations between strength and rest duration and number (r=-0.339, p=0.03 and r=-0,464, p=0.002), saturation changes (r=-0.383, p=0.012), dyspnea and fatigue levels (r=-0.475, p=0.001) during the walk test.

Conclusion: Hand grip strengths of COPD patients in exacerbation showed good correlation with 6-minute walk test, indicator of functional capacity. Hand grip strength measurement which is simple to perform and has low cost may be a helpful indicator of muscle performance, especially when 6-minute walk test can not be performed during exacerbation.

P1248

Effects of case management on hospitalisation and exacerbation rate in severe, complex COPD: A randomized controlled trial

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Background: Acute exacerbations have negative effects on lung function, physical performance, dyspnoea, and quality of life. Patients with severe COPD and co-morbidities are especially vulnerable to exacerbations.

Aim: We investigated if a case manager could reduce number and duration of hospital admissions due to exacerbations of COPD.

Method: In this RCT, 81 COPD patients GOLD stage 3-4 and co-morbid disease, with ≥ 1 reported exacerbation in the past two years were randomised to usual care or a case management care condition. In the usual care condition, patients visited the pulmonary nurse every 3 to 6 months. In the case manager condition, the pulmonary nurse started with a home visit, and contacted patients at least every 6 weeks by phone. Basic self-management techniques were taught and an exacerbation plan was offered to the patient and all health care providers.

Results: Number and duration of hospital admissions were not lower in the experimental condition. The number of exacerbations reported by the general practitioner did not differ significantly. No differences were found between the two conditions with respect to health status measured by the CRQ. There was major drop out in both groups (42%), main reason was death (53%). Patients were more satisfied with the experimental condition, particularly because the case manager helped coordinating the complex care by many professionals.

Conclusion: Positive benefits on health status and hospital admission rates and duration were not found. However, patients with severe COPD and multiple co-morbidities benefit from a case manager by structuring care in a better way leading to increased patient satisfaction.

P1249

The current situation and the perspective of respiratory care in Japanese COPD patients revealed by Japanese White Paper on home respiratory care 2010 – COPD subgroup analysis Jun Ueki^{1,3}, Michiaki Mishima^{2,3}, Koichiro Tatsumi³, Kazuhisa Takahashi³,

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To assess the current situation and the perspective of respiratory care of outpatients with chronic respiratory diseases, the nationwide survey was conducted. In the patient survey, the questionnaires were sent to 3090 patients (JFPORD) and the return rate was 27%. Of the 338 COPD patients, 73% were receiving LTOT (LTOT and HMV 24%). With regard to the pharmacological treatment, Tiotropium, LABAs, ICSs, mucolytic agents, macrolides were prescribed in 57%, 72%, 50%, 51%, and 20%, respectively. Those receiving pulmonary rehabilitation (PR) and nutritional guidance accounted for 63% and 42%, which was 60% and 28% in the 2005 White Paper, respectively. Among the LTOT/HMV group, 31% had been hospitalized more than once in the past year due to exacerbation. Concerning wishes for medical staffs, the most common reply was they wanted to be taught more about the skills for self-management, which were 78% and 83% in 2010 and 2005, respectively. The most common concrete examples of this concerned PR. The three most common demands concerning LTOT were a wish for subsidy of electricity cost of the concentrator (45%), for distribution or rental of oximeters (41%), and better explanation of the response of the LTOT/HMV providers in the time of natural disaster (35%). It is suggested that there are demands regarding the needs of patients for more information about the self-management skills and an increase in opportunity to receive PR. To achieve anxiety-free respiratory care for LTOT/HMV, the reimbursement policy for the providers has to be made, especially for handling of patients in the time of natural disaster.

P1250

The "susceptibility to exacerbation" phenotype in COPD and response to pulmonary rehabilitation

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Introduction: Exacerbations are a key feature of COPD and are known to impact lung function, daily physical activity level, quality of life, survival, and health resource usage. Pulmonary rehabilitation (PR) is an effective treatment for disability in COPD, with previous research identifying improved outcome for patients reporting no exacerbations (NE) when compared with patients suffering exacerbations

tions (Riario-Sforza et al., 2005). A frequent susceptibility exacerbation phenotype (\geq 2 exacerbations in previous year) has been identified (Hurst et al., 2010) which may have implications for response to PR. We hypothesised that patients with frequent exacerbations (FE) would gain less benefit from an 8-week outpatient PR program.

Method: In 93 COPD patients reporting NE (n=28), one exacerbation (OE) (n=28) or FE (n =37) in the previous year, the following assessments were made before (T0) and after (T1) PR: fat free mass (FFM), incremental shuttle walk (ISW), self-report Chronic Respiratory Disease Questionnaire (CRDQ-SR).Median (IQR) change in ISW, FFM, and CRDQ-SR total score from T0 to T1 was compared between groups using Kruskal-Wallis tests.

Results: ISW distance and CRDQ-SR increased in NE (80 (13-148)m, 13.5 (1.5-23.8)) OE (50 (0-110)m, 19.0 (2.0-32.0)) and FE (60 (20-270)m, 21.0 (8.0-28.0)) groups.FFM increased in NE (0.36 (-1.32-1.26)kg) and OE (0.51 (-0.85-1.33)kg) but not FE (-0.07 (-1.38-2.29)kg).No significant differences were found between groups for any variables (ISW: p = 0.46, CRDQ total p = 0.35, FFM: p = 0.94).

Conclusion: The "susceptibility to exacerbation" phenotype does not appear to affect improvements in exercise capacity, or health related quality of life gained during PR.

P1251

Promoting excellence in COAD care - Through a community

multidisciplinary team approach

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Background: It was estimated that the prevalence of COPD among the elderly Chinese living in Hong Kong was 25.9%.

Methods: The COAD Alliance Community Program was designed and carried out by a community hospital in Hong Kong. It involves a multidisciplinary team of specialists via a community outreach approach. The highly dedicated team includes respiratory physicians, physiotherapists, occupational therapists, community outreach nurses, and other community based specialists. High risk patients with more than 3 emergency room or hospital admissions per year were identified and recruited into the program. They were then assessed by case managers who were responsible organizing the community based services for these patients. Services provided include advice and information provision, self care management at home, outreach nursing visits, outpatient physiotherapy sessions and emotional/counseling support. These patients "pre - program" and "post - program" emergency room admission rates, inpatient admissions and hospital inpatient bed-days were recorded and tabulated.

Results: 100 patients were recruited into the COPD Alliance Community Program. Six patients died during this period, with 94 patients remaining for analysis. Reduction in AED attendance (mean number of admission of 2.38 pre program c.f 1.68 post program) and medical ward admissions (1.6 c.f 0.85) was evident. There is also a significant reduction in hospital inpatient bed-days (8.16 days pre program c.f. 4.42 days post program, p = 0.05). Total cost reduction is 215,028 Euros.

Conclusion: The multidisciplinary approach was effective in reducing emergency room attendances, inpatient bed –days and total health expenditure.

P1252

Breathlessness and social cognition: The effect of social comparison on perceived breathlessness in asthma and COPD

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Aim: The effect of context variables on the perception of breathlessness has been investigated extensively, but not in a social cognitive framework. Our aim was to test how findings in social cognition can be translated from general self-perception to research on dyspnea. We investigated the effect of social comparison on perceived dyspnea in an experimental study in asthma patients and in a field study in COPD patients in rehabilitation.

Methods: In Study 1, 50 asthma patients participated in an experiment with two sequences of resistive load breathing. Both sequences were preceded by the presentation of one of two social comparison standards. We measured reported dyspnea and persistence in load breathing. In Study 2, 48 patients with COPD completed measures on social comparison at the start and end of rehabilitation as well as on perceived dyspnea during activity. In both studies, we expected comparison standards to affect self-report of breathlessness. We controlled for functional parameters such as lung function (Study 1) and BODE index (Study 2). **Results**: In both studies, we found an significant impact of social comparison on the report of breathlessness. In Study 1, we found social comparison to have an impact on persistence in load breathing. Furthermore, as moderator of the relationship of social comparison and dyspnea we identified perceived similarity with comparison standards.

Conclusion: Social cognitive processes can shape the perception of breathlessness. Particularly in settings with a strong social component such as group exercise training in rehabilitation, these social cognitive mechanisms might be important targets to improve exercise persistence.

P1253

Participants perspectives of living with COPD: The role of different groups of health professionals

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Methodology: This is a qualitative research study of participants experiences of a pulmonary rehabilitation (PR) programme based in Wakefield, UK. 4 group interviews were carried out in spring 2010 involving 24 participants. 22 had a primary diagnosis of COPD (mean FEV1 1.1 litres, 42% predicted), 1 had lung cancer and 1 was a carer for a participant with COPD. A structured interview included discussion of the roles of different groups of health professionals- general practitioners (GP) and nurse specialists.

Results: Particpants liked their GP to have good communication skills. Specific examples of good practice were describing illness in a manner which the participant could understand and allowing time to ask questions. Patients appreciated the amount of time they were able to spend with a doctor, liked regular contact with the same GP and disliked waiting for appointments. Participants wanted to feel that something could be done to improve their situation, trusted doctors decision making and rarely asked questions regarding their treatments. Specialist nurses were considered to be more helpful in managing symptoms than GPs. Nurses had more time for patients, were more likely to involve patients in decision making, and showed greater empathy. Some nursing staff were considered to have more specialist knowledge than GPs. Participants described a high degree of trust in nurses decision making and were more comfortable discussing their condition with them.

Summary: Patients with COPD value good communication skills, expert knowledge, a positive approach and good time management in their health providers. Specialist nurses are able to deliver an effective patient-centred service.

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The impact of depression in recovery and outcome of patients hospitalized for COPD exacerbation

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Background: Depression has been associated with worsening of COPD symptoms and quality of life, more exacerbations and increased mortality.

Objectives: To evaluate prospectively the impact of depressive symptoms on admission on the outcomes of patients hospitalized for COPD exacerbations (ECOPD).

Methods: We studied prospectively 151 patients admitted to hospital for ECOPD. Depression symptoms were evaluated with Becks Depression Inventory. Pulmonary function tests, arterial blood gases and COPD assessment test (CAT) score, were recorded on the day of their admission and 3, 10 and 40 days later. Patients were evaluated monthly for one year.

Results: Duration of hospitalization was longer in patients with high depressive symptoms [5 (3, 6) vs 12 (10, 14), p<0.001]. Furthermore, these patients presented slower recovery from ECOPD as evaluated by improvement in FEV₁, blood gases, dyspnea and CAT score (p<0.001). Patients with more depressive symptoms had more severe disease, according to FEV₁ as well as ADO and DOSE indexes on stability compared to patients with less depressive symptoms (41.5±10.7 vs 62.5±20.0, 4.8±1.3 vs 4.1±1.2 and 3.5±1.2 vs 1.9±1.2 respectively; p<0.001). During the follow up period, patients with high depressive symptoms had more ECOPD (4.0±1.7 vs 1.2±1.6, p<0.001), shorter time to the next ECOPD and higher one-year mortality (p<0.001). Frequent exacerbators (22.2±13.1 vs 9.1±4.2 p<0.001).

Conclusions: Depressive symptoms in patients admitted for ECOPD have significant impact on their recovery and are related to worse survival and more new ECOPD during the following year.