471. Disease management in specific primary care populations

P4614

Patient-reported clinical control and peak-flow: Effects of 30 versus 6 month treatment with inhaled corticosteroids (ICS) with/without long-acting$_2$-agonists (LABA) in moderately severe COPD

J.B. Snoeck-Stroband[1], T.S. Lapperre[2], M.M.E. Gosman[4], W.J.J. Assendelft[3], H.M. Boezen[5], N.H.T. ten Hacken[4], T. van der Molen[6], P.S. Hiemstra[2], D.S. Postma[4], P.J. Sterk[7], J.K. Sont[1], The Glucold Study Group. *[1]Medical Decision Making, Leiden University Medical Center, Leiden, Netherlands; [2]Pulmonology, LUMC, Leiden, Netherlands; [3]Public Health and Primary Care, LUMC, Leiden, Netherlands; [4]Pulmonology, University Medical Center Groningen, Groningen, Netherlands; [5]Epidemiology, UMCG, Groningen, Netherlands; [6]General Practice, UMCG, Groningen, Netherlands; [7]Pulmonology, Academic Medical Center, Amsterdam, Netherlands*

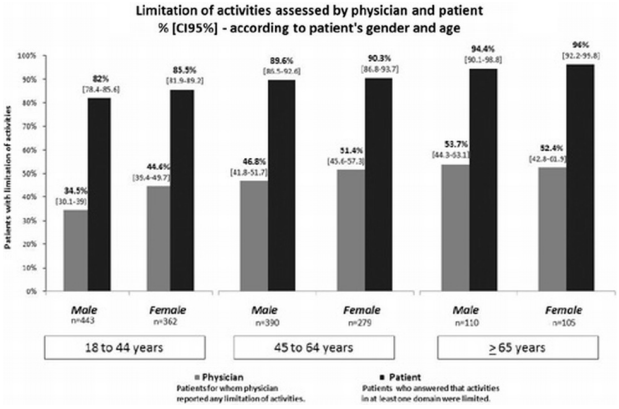
Rationale: Long-term ICS therapy can improve FEV_1-decline in COPD [Celli AJRCCM 2008], whilst discontinuation worsens FEV_1-decline [Lapperre Annals 2009]. Self-monitoring may strengthen adherence to chronic medications when immediate impact on symptom control can be demonstrated.
Aim: To examine effects of 30 *vs.* 6 months ICS/LABA therapy on clinical control and PEF in COPD.
Methods: 114 Patients (GLUCOLD study: 62±8 yr, 46±24 packyr, no steroids >6 mo, postbr FEV_1 63±9%pred, postbr FEV_1/IVC 48±9%) were studied, comparing fluticasone propionate (FP) 30 and 6 mo (500 µg bid), FP/salmeterol (S) (50 µg bid) 30 mo and placebo (P). 2-Week diary cards with daily Clinical COPD Questionnaire (CCQ) and PEF were obtained every 3 months. A linear mixed effects model was used for analysis of highest CCQ scores and lowest PEF.
Results: PEF-level was increased for FP/S *vs.* FP (37 ml, p=0.001) at 6 mo. Continuation of FP improved CCQ functional score over time (-0.14/yr, p=0.039) and ameliorated PEF (11 ml/yr, p=0.042) *vs.* P. Discontinuation of FP at 6 mo worsened total (0.11/yr, p=0.025) and symptom score (0.17/yr, p=0.012) and diminished PEF (-12 ml, p=0.032) *vs.* its continuation. Addition of S to FP increased total (0.12/yr, p=0.015) and functional score over time (0.16/yr, p=0.026) and reduced PEF (-12 ml/yr, p=0.03) *vs.* FP.
Conclusion: Long-term ICS therapy improves functional performance and PEF, whilst discontinuation worsens total score, symptoms and PEF. Addition of S to FP increases PEF-level. ICS therapy may provide beneficial effects on patient-reported outcomes in moderately severe COPD.

P4615

Limitation of activities in treated patients with asthma may be underestimated – Results of a cohort study

Yan Martinat[1], Georges Granet[2], Delphine Leynaud[3], Juliette Ostinelli[3]. *[1]Centre Medical Parot, Clinique du Parc, Lyon, France; [2]Cabinet Médical, Avenue de Limburg, Sainte Foy Les Lyon, France; [3]Medical Department, AstraZeneca France, Rueil-Malmaison, France*

Background: Few data are available on limitation of activities in asthmatic patients, though it is one of 5 items used to assess asthma control (GINA 2009).
Objective: To assess frequency of limitation of activities according to gender and age group in a cohort of asthmatic patients.
Methods: From March to October 2010, 667 GPs in France recruited 1975 adult asthmatic patients treated with inhaled corticosteroids (ICS) ± long-acting β2-agonist (LABA) in a cross-sectional observational study [NCT 01078688]. In a questionnaire on impact of asthma on their daily-, physical- and work/school-activities, patients assessed limitation to these as "not at all", "mild", "moderate" or "severe".



Results: 1757 patients were analysed: mean age 45.4yrs; men 56.8%; current smoker 20.2%; mean time since diagnosis 16.8yrs; 90% treated with ICS+LABA, 29% with antileukotrienes, 48% with antihistamines; 44% had severe exacerbation in past year; 33.3% had comorbidity which limited activities. According to GINA criteria (excluding lung function) 76.2% were not controlled. GPs reported limitation of activities in 44.4%. Whilst 87.4% of patients reported limitation of activity (mild, moderate or severe) in at least one domain:75.2% daily-, 80.5% physical-, 50.3% work/school-activities.
Conclusion: Impact of asthma on activities was frequent and underestimated among these treated patients. It deserves more attention when assessing asthma control.

P4616
Population segmentation to identify priority targets for identification and behaviour change interventions in COPD
Matt Kearney, Julia Crighton, Kevin Holton, Anne Moger, Robert Winter, Sue Hill. *Respiratory Programme, Dept. of Health, London, United Kingdom*

Background: In England 800,000 people are diagnosed with COPD. 2.7 million have the disease but are undiagnosed. Smoking is the dominant risk factor. Targeted identification of those at increased risk combined with effective behaviour change interventions could significantly reduce the disease burden.
Objectives: To identify and characterise those population groups in England at greatest risk of COPD in order to maximise the impact of targeted behaviour change interventions.
Methods: A social marketing methodology was employed. An England-wide audience segmentation based on life-stage, socio-economic and environmental factors was conducted to identify priority segments. Focus groups and interviews with informants in each segment provided a rich understanding of behaviours, attitudes and motivation.
Results: Three segments (children aged 7-12 and young men and women in routine/manual occupations) were identified as priority targets for prevention. Three further segments (mid-life men and women in routine/manual occupations and older routine/manual smokers) were identified as priority targets for identification of undiagnosed COPD. Two segments (Bangladeshi men and routine/manual parents who smoke) were identified as priority targets for both prevention and identification.
Conclusions: Targeting priority population segments will maximise the effectiveness of identification and behaviour change interventions in COPD and will ensure efficient use of healthcare resources. The results of this segmentation and insight work have informed development of the national strategy in England for the prevention and early identification of COPD.

P4617
Validity and reproducibility of a physical activity questionnaire for elderly
Lara Siebeling[1], Sarah Wiebers[1], Leo Beem[1], Milo Puhan[2], Gerben ter Riet[1]. *[1]Department of General Practice, Academic Medical Centre, University of Amsterdam, Amsterdam, Netherlands; [2]Department of Epidemiology, Bloomberg School of Public Health, Johns Hopkins University, Baltimore, United States*

Background: Physical activity is important for elderly to maintain their health and functional ability. It helps predict the course of chronic diseases. Many existing questionnaires have not been compared to activity monitors. We examined validity and reproducibility of the LASA Physical Activity Questionnaire (Lapaq) against an accelerometer in Dutch elderly (65+).
Methods: Participants wore the accelerometer for two weeks and filled in Lapaq twice. We examined validity using correlation coefficients, histograms and modified Bland-Altman plots. We used logistic regression to assess how well Lapaq discriminates between persons whose activity level is or is not in accordance with recommendations from the American College of Sports Medicine and the American Heart Association. Intraclass correlation coefficients (ICC) were used to examine reproducibility.
Results: 89 persons were included, 48% men, median age 73 and median BMI 25. 36%, 43%, and 22% had no, one, or 2+ chronic diseases. As a reference, two full weeks contain 20160 minutes (336h). The total duration of activity in two weeks was 2439 (Lapaq T1), 1994 (Lapaq T2) and 2788 minutes (accelerometer). The difference between Lapaq T1 and accelerometer was 510 minutes (8.5 hours). The Pearson correlation coefficient was 0.34 (95% CI 0.13-0.51). The I.C.C. was 0.68 (95% CI 0.56-0.79). The area under the curve is 0.73 (95% CI 0.59 - 0.86).
Conclusions: Due to moderate reproducibility and low validity, Lapaq seems unsuitable for exact measurement of physical activity in elderly. If the more modest aim is to determine if a person's activity level is above the recommendation level, Lapaq classifies around 73% correctly.

P4618
Urban-rural differences in health status among patients with chronic obstructive pulmonary disease (COPD)
David Coultas[1], FengHsiu Su[2], Bradford Jackson[2], Sumihiro Suzuki[2], Kaming Lo[2], Karan Singh[2], Sejong Bae[2]. *[1]Internal Medicine, University of Texas HSC-Tyler, Tyler, TX, United States; [2]Biostatistics, University of North Texas HSC, Fort Worth, TX, United States*

Background: While geographic variation in health care access and quality may affect health status of patients with chronic diseases little is known about the health status of patients with COPD.
Objectives: The purpose of this analysis was to examine urban-rural differences in health status among patients with COPD.
Methods: This was a cross-sectional analysis of baseline data from patients with COPD enrolled in a self-management clinical trial. Urban-rural residence was determined from zip code. Health status was measured using BODE index (BMI, obstructive impairment, dyspnea severity, exercise capacity), and generic (SF-12) and disease-specific (Chronic Respiratory Questionnaire [CRQ]) quality-of-life instruments. Independent sample t-tests and chi-square tests were used to examine statistical differences.
Results: To date, results from 82 patients are available with mean age of 69 years, 46% female, 51% rural residence, and 98.8% with health insurance. Rural residence was associated with greater impairment (mean [SD] BODE index=4.9 [1.8]) compared to urban residence (3.4 [1.8], p=0.0003). Moreover, 6-minute walk distance was clinically and significantly less among rural (325 m [104]) vs. urban (375 m [90]) (p=0.02) residence. A similar pattern was found for quality-of-life measures with a lower SF-12 physical summary score among rural (28.3 [9.6]) vs. urban (36.1 [10.0], p=0.0006) residence and clinically worse dyspnea (CRQ-dyspnea=4.1 [1.0]) vs. 4.8 [1.3], respectively, p=0.009).
Conclusion: In this population of patients with COPD rural residence was associated with poorer health status for all measures despite similar access to health care as measured by health insurance.

P4619
Screening of health status in patients with COPD in primary care is essential
Jeannette Peters[1,2], Leonie Daudey[1,2], Anke Lahaije[2], Lonneke Boer[1,2], Eveline de Geus[1], Johan Molema[2], Yvonne Heijdra[2], Jan Vercoulen[1,2]. *[1]Department of Medical Psychology, Radboud University Nijmegen Medical Centre, Nijmegen, Netherlands; [2]Department of Pulmonary Diseases, Radboud University Nijmegen Medical Centre, Nijmegen, Netherlands*

Background: Guidelines advice to measure health status (HS) in COPD patients. In secondary care (SC) this is more common than in primary care (PC). Problems in HS in PC might be underestimated resulting in inadequate treatment.
Aim: To investigate the proportion of COPD patients in PC with severe problems in HS.
Methods: 314 PC COPD patients were included. Eight sub-domains of HS were measured by the Nijmegen Clinical Screening Instrument (NCSI) covering Functional impairment, Symptoms and Quality of Life. Data from 303 SC COPD patients were available to compare the meaning of the incidence and severity of problems in PC patients.
Results: Patients in PC did not differ on sex (59 vs 70% male) and age (mean 66 vs 67 years), but had less severe COPD compared to SC (stageI: 28 vs 16%; II: 59 vs 45%; III: 13 vs 32%; IV: 0 vs 8%). Lower proportions of patients with severe problems were found on the domain Functional impairment and the sub-domain Subjective symptoms in PC as compared to SC (Table 1). GOLD was not predictive for experienced problems in any of the sub-domains in PC.

Table 1. Percentages of patients with severe problems in primary care (PC) and secondary care (SC)

		PC (%)	SC (%)
Functional impairment	Behavioral impairment	31	45*
	Subjective impairment	29	50*
Symptoms	Subjective symptoms	30	54*
	Dyspnea emotions	29	34
	Fatigue	52	52
Quality of Life	General QoL	55	65
	Health related QoL	23	60*
	Satisfaction relations	18	44*

*χ^2 $p<0.01$.

Conclusion: Severe problems in many sub-domains of HS were substantial in PC patients. In 5 of 8 sub-domains of HS similar percentages of COPD patients in PC and SC experience severe problems. This implies that screening for problems in HS is needed in PC to warrant patient tailored treatment.

P4620
Using community pharmacy to identify patients at risk of poor asthma control and potential contributory factors
Helen Reddel[1], Kate LeMay[2], Bandana Saini[2], Sinthia Bosnic-Anticevich[2], Lorraine Smith[2], Deborah Burton[3], Jun Ju Christine Song[2], M. Chehani Alles[2], Kay Stewart[4], Lynne Emmerton[5], Ines Krass[2], Carol Armour[2]. *[1]Clinical Management Group, Woolcock Institute of Medical Research, Sydney, Australia; [2]Faculty of Pharmacy, The University of Sydney, Sydney, Australia; [3]School of Biomedical Sciences, Charles Sturt University, Orange, Australia; [4]Pharmacy Practice, Monash University, Melbourne, Australia; [5]School of Pharmacy, The University of Queensland, Brisbane, Australia*

Aim: To describe a population identified by trained community pharmacists as being at risk for poor asthma outcomes, and to identify factors associated with poor asthma control.

Methods: A cross-sectional study was conducted in 96 metropolitan and regional Australian pharmacies. Community pharmacists with specialised asthma training enrolled 570 patients aged ≥18 years with doctor-diagnosed asthma who were considered at risk based on suboptimal asthma control or lack of recent GP asthma review, and conducted a comprehensive asthma assessment. Assessment of asthma control was based on self-reported frequency of symptoms and activity limitation during the previous month. Asthma history, spirometry and inhaler technique were documented. Medication use was recorded from pharmacy records and self-report.
Results: 570 patients were recruited, of whom 437 (77%) had poor asthma control. 21% smoked, 28% had an action plan, 69% used combination inhaled corticosteroid (ICS)/long-acting β2-agonist (LABA) medications, and only 17-28% used their inhaler correctly. In terms of adherence, 90% had their ICS or ICS/LABA dispensed <6 times in the previous 6 months, which is inconsistent with regular use. A logistic regression model showed that patients who smoked, had incorrect inhaler technique or low adherence were more likely to have poor control.
Conclusions: Community pharmacists identified patients with asthma at risk of suboptimal control, and factors that contribute to this were identified. There is an opportunity within pharmacies to target poorly-controlled asthma and provide timely and tailored interventions.

P4621
Clinical determinants for oral steroids during COPD-exacerbations in primary care
P. van Velzen[1], R.J.B. Loijmans[2], M. Amelink[1], M. Stommel, G. ter Riet[2], P.J. Sterk[1]. *[1]Respiratory Medicine, Academic Medical Centre, Amsterdam, Netherlands; [2]General Practie, Academic Medical Centre, Amsterdam, Netherlands; [3]Information and Communication Technology, Stichting Huisatsen Dienstenposten Amsterdam, Amsterdam, Netherlands*

Rationale: International guidelines recommend a course of oral corticosteroids (OCS) in addition to bronchodilator therapy for the treatment of COPD-exacerbations, because systemic corticosteroids shorten recovery time, improve lung function and reduce treatment failure. The aim of this study was to examine which patient characteristics are associated with prescription of OCS by general practitioners (GPs) during COPD-exacerbations.
Methods: This study comprised a database analysis of the centralized out-of-hours GP service in Amsterdam that serves a population of 750,000 people. Contacts were registered in an electronic medical record. We retrieved all records of patients treated for a COPD-exacerbation in 2008. Patients who received antibiotics were excluded. Documented symptoms and signs were coded as present/absent. We compared treatment with OCS with or without bronchodilator therapy versus bronchodilator therapy only. Data were cross-sectionally analysed.
Results: 743 COPD-exacerbations were identified. 30.8% were referred to hospital and 69.2% were treated at home. Of these cases, 135 (54.8%) received OCS and 111 (45,2%) bronchodilator therapy only. Patients who received systemic OCS did not differ from those treated without OCS in age (68.9 *vs* 70.9±13.5, p=0.2), documented history, symptoms, hemodynamic characteristics, and lung sounds (p> 0.1).
Conclusion: OCS with of without bronchodilator therapy are prescribed in 27.3% of COPD-exacerbations that are dealt with by GPs in an out-of-hour setting. We could not identify patient related determinants of the prescription of OCS. This suggests that the indication of systemic steroids during COPD-exacerbations requires clinical foundation.

P4622
Asthma control or mental lack of control? Are they related?
Roser Poblet, Xavier Flor, Laia Lamarca, Judit Mendez, M. Victoria Feijoo, Silvia Alvarez. *CAP CHAFARINAS, Institut Catala de la Salut, Barcelona, Spain*

Background: The association between asthma and mental disorders is known, being anxiety and depression the most common ones.
Objective: To determine the proportion of mental disorders (anxiety and/or depression) in our asthmatic patients compared to the non asthmatic population, and to assess the relationship between the severity and control level of asthma and the presence of psychiatric comorbility.
Methods: A transversal descriptive study was developed with 317 asthmatic and 306 non asthmatic patients, from 17 to 70 years old in an urban primary care centre. The Goldberg test for screening of anxiety and depression was performed. Other analyzed items were: age, gender, previous anxiety and/or depression, chronic diseases, severity of asthma and level of control.
Results: 70.3% of the asthmatic patients were women versus 51.3% on the non asthmatic group, the average age was 42 (SD 16.89) and 47 (SD 14.09) years old respectively. 57.1% had intermittent asthma, 16.7% mild persistent and 26.2% moderate persistent. 62.7% presented controlled asthma, 23.4% partially controlled and 13.9% uncontrolled asthma. The Goldberg test score of the asthmatic group showed anxiety in 51.1% compared to 34.6% on the non asthmatic group (p<0.0001) and depression in 57.4% compared to 38.9% on the other group (p<0.0001). Better asthma control was associated with lower anxiety (p=0.002) and depression (p=0.004). The association between the severity of asthma and the presence of mental disorders was not proven.
Conclusions: The asthmatic group showed greater proportion of anxiety and depression compared to the non asthmatic group. Better asthma control was associated with lower anxiety and depression. No other associations were significant.

P4623
Inappropriate overuse of inhaled corticosteroids in patients with moderate COPD in UK primary care
Mike Thomas[1], Amr Radwan[2], Carol Stonham[3], Sam Marshall[4]. *[1]Centre of Academic Primary Care, University of Aberdeen, Aberdeen, United Kingdom; [2]Clinical Development and Medical Affairs, Novartis, Frimley, United Kingdom; [3]Nurse Practitioner, Minchinhampton Surgery, Stroud, United Kingdom; [4]Consultancy, pH Associates, Marlow, United Kingdom*

Introduction: UK and international guidelines recommend that patients with moderate COPD (FEV_1 50-79% predicted) uncontrolled by a short-acting bronchodilator alone should receive maintenance monotherapy with a long acting beta agonist (LABA) or long acting muscarinic antagonist (LAMA). Add-on inhaled corticosteroids (ICS) are only recommended in those with FEV_1 <50% &/or exacerbations. We present data quantifying the prescribing of ICS in routine primary care.
Methods: A retrospective observational study of management of moderate COPD in 314 patients (FEV_1 50-79% predicted. $FEV_1/FVC<70\%$) diagnosed during/before 2007. Three years' patient data were collected from routine medical records in 10 general practices in England. Analysis included stratification by severity of disease, presence of concomitant asthma & frequency of exacerbation - factors which may affect ICS use.
Results: 234 (75% of those with moderate COPD) received ICS, by "stand-alone" ICS inhaler (n=69, 22%) &/or as a combination ICS-LABA device (n=188, 60%). 151 of 205 (74%) without concomitant asthma received ICS, vs 83/109 (76%) of those with asthma.
The annualised median number of recorded exacerbations/year was 0.67 (range 0-6.67) overall and for those without concomitant asthma. 70% of those without asthma who did not have recorded exacerbations were prescribed ICS.
Conclusion: ICS are prescribed for most patients with moderate COPD, although not recommended in guidelines or product licences. This prescribing cannot be explained by concomitant asthma or frequent exacerbations. Inappropriate use of ICS increases costs & puts patients at risk of side effects. GPs should audit their use of ICS in moderate COPD.

P4624
17% of patients who call an ambulance for an exacerbation of COPD could be treated at home
Anna Moore[1], John Martin[2], John Bowen[2], Paul Katterhorn[2], Anthony Davison[1]. *[1]Heart and Chest Department, Southend University Hospital, Southend on Sea, Essex, United Kingdom; [2]East of England Ambulance Service, East of England Ambulance Headquarters, Cambourne, Cambs, United Kingdom*

Introduction: COPD is a chronic condition and healthcare policy in almost all countries is to try and deliver as much care for chronic diseases in the community and reduce the reliance and expense of hospital care. The National Clinical Guideline Centre (NICE) guidelines for COPD (2010) (www.nice.org.uk/guidance/CG101) give clear recommendation for factors to consider when deciding to treat a patient at home. The aim of this study was to see what percentages of patients who had an exacerbation of COPD and call an ambulance meet the criteria for home treatment.
Methods: All 18 patients who had called an ambulance because of an exacerbation of COPD in 17 days were included in the study. The ambulance service recorded the 12 relevant factors from the NICE guideline which should be considered when deciding to treat a patient at home on a proforma over 17 days.
Results: Saturation was ≤ 87% in 9 patients. 6 were not able to cope at home, 8 had severe breathlessness, 7 had poor general condition, 10 had poor level of activity, none were cyanosed, 4 had worsening peripheral oedema, all had a normal level of consciousness, 6 were receiving LTOT, 7 were living alone or not coping, no patients recorded having acute confusion, 6 had a rapid rate of onset, 5 had significant comorbidities.
Conclusions: 3 of the 18 patients (17%) had no factor that indicated that there was a need to be treated in hospital. The majority of patients who call an ambulance with an exacerbation get taken to hospital. Hospital at home for COPD has been proven to be successful and 17% of patients who call an ambulance could be safely managed in such a scheme. This would avoid them being assessed and admitted to hospital.

P4625
Prescribing patterns for allergic rhinitis in general practice setting: Adherence to ARIA guidelines
Marzia Simoni[1], Sara Maio[1], Sandra Baldacci[1], Anna Angino[1], Patrizia Silvi[1], Marco Borbotti[1], Franca Martini[1], Francesco Di Pede[1], Giovanni Viegi[1,2]. *[1]Pulmonary Environmental Epidemiology Unit, CNR Institute of Clinical Physiology (IFC), Pisa, Italy; [2]CNR, Institute of Biomedicine and Molecular Immunology (IBIM) "A. Monroy", Palermo, Italy*

Background: Allergic rhinitis (AR) and asthma are often co-morbidities. The correct management of AR should be ensured by the use of international ARIA (Allergic Rhinitis and its Impact on Asthma) guidelines (GL).
Aim: To prospectively evaluate the adherence to GL of General Practitioners (GPs) for treating AR patients.
Methods: Analyses concern 1197 patients (14-90 years, median 37) of 107 Italian

GPs. Evaluation of appropriateness was based on ARIA GL, according to AR classification.
Results: 44% of patients had concomitant asthma diagnosis. Among the 84 patients with moderate-severe persistent AR, 24% (18% of 40 with concomitant asthma) were prescribed antihistamines monotherapy. Among the 553 patients with mild-intermittent AR, 42% (36% of 332 with only AR) were prescribed combined therapies. In general, the adherence to GL was 57% for patients with only AR and 46% for those with AR+asthma ($p < 0.001$). The adherence increased with increasing AR severity and reached 81% for the patients with moderate-severe persistent AR (89 and 95% for those with only AR or AR+asthma, respectively).
Conclusions: GL recommendations are not fully applied within the clinical practice. The adherence to ARIA GL is higher for treating more severe AR. These findings underscore the need to monitor the implementation of clinical practice guidelines among GPs with the attempt to improve their compliance.
This work was supported by the Italian Agency of Drug (AIFA), project no. FARMJY5SA "Respiratory allergic diseases: monitoring study of GINA and ARIA guidelines (ARGA)".

P4626
General practitioners' views about managing depression in patients with chronic obstructive pulmonary disease
Abebaw Yohannes. *Health Professions, Manchester Metropolitan University, Manchester, Greater Manchester, United Kingdom*

Introduction: Depression is common in patients with chronic obstructive pulmonary disease (COPD). COPD patients consult their general practitioners at least once or twice a year because of acute exacerbations. There is little data available on the management of depression in patients with COPD.
Aims: The study investigated general practitioners (GP's) views about recognising and treating depression in patients with COPD.
Methods: We conducted a postal survey of 3,957 GP's in England about their views on recognising and treating depression in patients with COPD. The survey examined the GP's views using a likert scale (0 = strongly disagree, 2 = neither agree or disagree, 4 = strongly agree). The questions were prioritising treatment, value of screening for depression, difficulty of treating depression, best way of treating depression, depression exacerbates and interferes self-managment of COPD.
Results: 3,957 general practitioners were mailed. Of these, 857 (22%) complete responses were received. Seventy-two percent of GPs agree screening for depression regularly, 9% disagree and neutral 19%. Prioritising treatment of COPD symptoms over depression disagree 21%, neutral 46% and 33% agree. Convincing COPD patients that depression needs treatment: disagree 27%, neutral 30% and agree 43%. Depression exacerbates COPD symptoms: disagree 9%, neutral 24%, and agree 67%. Depression impairs self-management of COPD: disagree 4% and agree 96%.
Conclusions: Most GPs reported the importance of screening for depression regularly and depression impedes the self-management of COPD. Over two-fifths of the GPs find it difficult to convince patients to offer treatment. Further studies are required.

P4627
Use of GOLD staging as a guide for treating COPD patients in primary care
David de la Rosa[1], Antonia Ocanya[2], Pilar Martínez[1], Raul Bonich[3], Dolores Alvarez[4], Eva Calvo[5], Emma Albia[3]. *[1]Pneumology, Hospital PLató, Barcelona, Spain; [2]Family Medicine, EAP Ocata-Teia, El Masnou, Barcelona, Spain; [3]Family Medicine, EAP Vic-1 Nord, Vic, Barcelona, Spain; [4]Family Medicine, EAP El Masnou, El Masnou, Barcelona, Spain; [5]Family Medicine, EAP Barcelona-Sants, Barcelona, Spain*

Introduction: The best strategies to reduce the costs derived from COPD are early diagnosis and adequate managing in initial phases. Our aim was to evaluate the adequacy of COPD treatment according to GOLD guidelines, in Primary Care (PC) patients.
Design & methods: Descriptive, transverse, multicentre study in 5 PC centers. Computerized clinical histories of patients with COPD diagnosis code were revised. We recorded spirometric data and current treatment of each patient. We evaluated spirometric confirmation of COPD, GOLD stage and adequacy of treatment according to GOLD.
Results: We analyzed 1220 patients (71.5% men), mean age 69.8±13 years. 37.5% never smokers.
Rates of spirometry performance and spirometric confirmation of COPD were low (46.3% and 46% respectively). Adequacy of treatment to GOLD stage was 61.4%, and increased with severity of the disease ($p<0.05$).
In Gold 2, only 15.5% were using exclusively bronchodilators (BD). 40.4% were receiving inhaled steroids (IS) alone or in association to BD. 31.8% were taking "other" treatments (mucolytics, montelukast, oral steroids). In Gold 3, 9.9% of patients were taking exclusively BD, 18.3% realized treatment with 2 BD associated to IS and 46.5% were using other treatments.

	GOLD I (n=46)	GOLD II (n=129)	GOLD III (n=71)	GOLD IV (n=8)	TOTAL
SABA (%)	37	35.7	45.1	87.5	28.1
LABA (%)	37	57.4	81.7	87.5	41.7
ICS (%)	47.8	61.2	80.3	100	44.5
Combinations (%)	32.6	43.4	67.6	87.5	32
Ipatropium (%)	26.1	25.6	32.4	25	21.6
Tiotropium (%)	17.4	31	46.5	62.5	18.9
Teophilines (%)	-	3.1	8.4	25	1.8
Longterm O2 therapy(%)	-	-	1.4	12.5	0.6

Conclusions: In many of the patients coded as COPD in PC, a spirometry lacks. The great proportion of never smokers raises doubts about correct codification. Prescription of IS and not inhaled treatments is too high in Gold 2.

P4628
Use of a pre-printed oxygen prescription section on a drug chart to improve practice of oxygen prescription and monitoring
Feven Atakte[1], John Wong[1], Bandipalyam Prathibha[2]. *[1]Medicine, King's College London School of Medicine, London, United Kingdom; [2]Medicine, WIlliam Harvey Hospital, Ashford, East Kent, United Kingdom*

Background: Oxygen can cause serious harm if not administered and monitored properly. By June 2009, the National Patient Safety Agency in the United Kingdom has received 281 reports of serious incidents (including deaths) related to poor oxygen administration (*NPSA website*). An oxygen audit was conducted at the William Harvey Hospital (WHH), in the United Kingdom, in 2009, after which a new drug chart with pre-printed oxygen prescription section was introduced in order to help improve oxygen prescription practice in the hospital.
Objective: Determine whether the introduction of pre-printed oxygen prescription section on the drug chart at WHH improved oxygen prescription and monitoring practices.
Method: Oxygen prescribing and monitoring practice were recorded from eight wards at WHH in December 2010. Data were collected using the British Thoracic Society "Oxygen Audit Collecting Sheet". Results were compared with the 2009 WHH audit, done prior to the introduction of the new drug chart.
Result: Forty-four out of 192 patients included in survey (23%) were on oxygen therapy. Fourteen of the 44 (32%) who were on oxygen had a valid prescription with recorded target saturation range (WHH 2009 audit: 10%, n=39).Three of the 19 patients (16%) who had some form of written instruction for oxygen had oxygen signed for on drug rounds (WHH 2009 audit: 27%).
Conclusion: Our results showed that the new drug chart, with the pre-printed oxygen prescription and monitoring section, did improve the rate of oxygen prescription, but not monitoring practices. Future areas of work include raising awareness of health professionals that oxygen is a drug and requires prescription and monitoring.