87. Quality of life and respiratory symptom management in primary care

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The relationship between socioeconomic status, quality of life and healthcare access in COPD: A systematic review

Sofia Georgopoulou[1], Alison J. Wright[1], John Weinman[2], Helen Booth[1], Hannah Thornton[1], Patrick White[1]. [1]*Primary Care and Public Health Sciences, King's College London, London, United Kingdom;* [2]*Institute of Psychiatry (IoP), Health Psychology Section, King's College London, London, United Kingdom*

Introduction: Socioeconomic deprivation is a significant health determinant in COPD. To examine the relationship between socio-economic status (SES), Quality of Life (QoL) and healthcare access in COPD, we conducted a systematic review.
Methods: Medline,Embase,WebofScience,PsychInfo,IBSS,IngentaConnect and CINAHL were searched for quantitative studies published in English (1947-2011). Articles reporting association between SES and any aspect of QoL and healthcare access were included.
Results: After screening 6889 papers and assessment of 1088 abstracts 76 studies were reviewed. Studies were categorised depending on outcome measures into either quality of life (n=45) or healthcare access (n=31). Quality of life included: disease severity, exacerbations, psychological status, physical functioning/activity, pulmonary function/respiratory symptoms and mobility. 66.7% (n=30) of the studies yielded a negative effect of low SES on QoL, 28.9% (n=13) showed no effect and 4.4% (n=2) found a positive influence. Healthcare access involved: hospitalisation rates, prescription patterns, medication adherence/use and diagnostic procedures. 61.3% (n=19) provided data for the negative influence of socioeconomic deprivation on healthcare access, 29% (n=9) showed no effect while 9.7% (n=3) found a favourable influence.
Conclusion: A consistent association between low SES and unfavourable outcomes in various domains of both QoL and healthcare access was found. Findings suggest a need to investigate the reasons for this negative association between SES and outcome in COPD. The possible explanatory role of factors such as patients beliefs and behaviour are being explored in an ongoing cohort study.

P685

The measurement of the impact of breathlessness in advanced COPD

Patrick White[1], Cathy Shipman[2], Sara Booth[3], Claudia Bausewein[2], Morag Farquhar[4], Irene Higginson[2], Helen Booth[1]. [1]*Primary Care and Public Health Sciences, King's College London, London, United Kingdom;* [2]*Department of Palliative Care Policy and Rehabilitation, King's College London, London, United Kingdom;* [3]*Addenbrooke's Hospital, Cambridge University Hospitals NHS Foundation Trust, Camridge, United Kingdom;* [4]*Department of Public Health & Primary Care, Cambridge University, Cambridge, United Kingdom*

Introduction: Breathlessness is the main symptom of COPD and should be a key outcome measure in studies of advanced disease. Measures of breathlessness have been poorly researched. There is no gold standard for the assessment of breathlessness in advanced disease. In this study we aimed to identify using existing tools a valid and reliable self-report measure of breathlessness for clinical research in advanced COPD.
Methods: 260 eligible patients with advanced COPD were identified from the disease registers of 72 general practices. Spirometry, MRC dyspnoea scale, mBorg, NRS, CRQ-SAS, Dyspnoea 12, and Hospital Anxiety and Depression Scale, were administered at interview. Distribution of responses, associations and correlations were examined.
Results: 146 (56%) patients were interviewed. Association between the different measures of breathlessness was variable with least correlation between the numerical measures mBorg and NRS and the other measures, and greatest correlation between CRQ-SAS and Dyspnoea 12. Usefulness of tools was limited by ceiling effects (limited room for more severe breathlessness) in MRC Dyspnoea scale and by floor effects (limited room for less severe breathlessness) in mBorg and NRS. Factor analysis of the five measures confirmed that the CRQ-SAS dyspnoea questionnaire (loading -0.74) and Dyspnoea 12 questionnaire (loading 0.73) were closest to the hypothesized latent true value of breathlessness (eigenvalue 2.33, difference 2.21).
Conclusions: Combination of CRQ-SAS dyspnoea and Dyspnoea 12 is the most suitable approach to valid, repeatable, measurement of breathlessness in clinical research in advanced COPD that is sensitive to change. MBorg retains a particular role in standardised exercise testing.

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Validity of the pediatric electronic quality of life instrument for childhood asthma in the Netherlands

Lisette van den Bemt[1], Stephanie van Bragt[1], Bart Thoonen[1], Peter Merkus[2], Tjard Schermer[1]. [1]*Department of Primary and Community Care, Centre for Family Medicine, Geriatric Care and Public Health (Route 117), Radboud University Nijmegen Medical Centre, Nijmegen, Netherlands;* [2]*Department of Paediatrics, Radboud University Nijmegen Medical Centre, Nijmegen, Netherlands*

Introduction: Assessment of health-related quality of life (HRQL) for children with asthma in daily care may facilitate shared decision-making and contribute to patient-centred care. Pediatric HRQL is unique to children and it is essential that an instrument used in daily care has an individualised part to prioritise issues that are especially important for the particular child. We have developed a pediatric HRQL instrument that is designed as a web based game and has an individualised part (Pelican instrument).
Aim: The aim of this study was to determine the clinometric properties of the Pelican instrument.
Methods: 68 children with asthma aged 6 – 12 years were recruited. Children completed the Pelican instrument on 3 occasions within a 2-month period. Additional information was collected on various aspects, including asthma control (ACQ, C-ACT) and HRQL (Feeling Thermometer and PAQLQ).
Results: The instrument had good test-retest reliability (ICC 0.83) and internal consistency (Cronbach's α: 0.90). Moreover, the instrument was able to discriminate between children with controlled and uncontrolled asthma and we observed good correlations with the PAQLQ and Feeling Thermometer ($r \geq 0.6$). Finally, the items selected by the children as "worst things about my asthma" (i.e., individualised part) were scored higher by the child than items they did not select (mean difference 0.97; scale 1-5).
Conclusions: The results indicate that the Pelican instrument is a valid and reliable instrument. The responsiveness of the instrument needs to be established. Further studies are needed to assess whether implementation of the Pelican instrument can facilitate patient-centred care.

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Intractable breathlessness in COPD – A suitable case for palliation?

Patrick White[1], Sara Booth[2], Sofia Georgopoulou[1], Wai Yee James[1], Scott Murray[3], John Moxham[4], Hilary Pinnock[5], Paul Seed[1], Cathy Shipman[6], Irene Higginson[6], Hannah Thornton[1], Helen Booth[1]. *[1]Primary Care and Public Health Sciences, King's College London, London, United Kingdom; [2]Palliative Care, Addenbrookes Hospital, Cambridge, United Kingdom; [3]Primary Palliative Care Research Group, University of Edinburgh, Edinburgh, United Kingdom; [4]Division of Asthma and Allergy, King's College London, London, United Kingdom; [5]Allergy and Respiratory Research Group, University of Edinburgh, Edinburgh, United Kingdom; [6]Palliative Care, Policy and Rehabilitation, King's College London, London, United Kingdom*

Introduction: Breathlessness is the major symptom of concern for people with advanced COPD. Intractable breathlessness may be described as "sustained severe breathlessness in patients who have not obtained relief from conventional treatment". This study set out to define the prevalence of intractable breathlessness in COPD and potential for its palliation.
Method: COPD patient records in south London practices were searched for ≥2 of: FEV1 ≤30% predicted, hospital admissions/exacerbations needing oral steroids, long term O2, and cor pulmonale. Participants were interviewed at home. Breathlessness was assessed using MRC Dyspnoea, mBorg, NRS, Dypsnoea-12 and Chronic Respiratory Questionnaire. Intractable breathlessness was defined using a combination of FEV1% predicted, CRQ-Dyspnoea, Dyspnoea-12 and the desire for more help. Treatment optimisation was offered where appropriate before reassessment of breathlessness.
Results: 5102 patients were identified in 72 practices, 2163 had spirometry-confirmed COPD. 260 (5%) were eligible and 146 (56%) took part. 65% reported breathlessness as their most important problem, 69% reported breathlessness everyday and 59% reported needing more help for breathlessness. 69% scored 4-5 on MRC Dyspnoea Scale. 63 (43%) were on sub-optimal treatment, 97% of whom received optimisation. Improvements in breathlessness weren't observed at re-assessment. 29 (20%) participants had intractable breathlessness; an estimated 2% of patients with confirmed COPD in the study population.
Conclusion: Intractable breathlessness affects around 1 in 50 COPD patients on practice registers. Increased recognition of this problem and provision of specialist palliative services for these patients is a priority.

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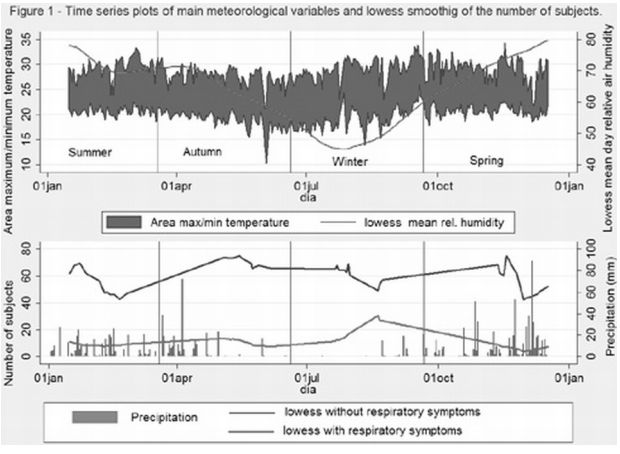
Relationship of respiratory symptoms and climatic seasonality at an out-patient primary health unit in Brazil

José Laerte Rodrigues Silva Júnior[1], Thiago Fintelman Padilha[2], Jordana Eduardo Rezende[2], Eliane Consuelo Alves Rabelo[2], Anna Carolina Galvão Ferreira[1], Marcelo Fouad Rabahi[1]. *[1]Instituto de Patologia Tropical e Saúde Pública, Federal University of Goias, Goiânia, Goiás, Brazil; [2]Faculty of Medicine, Federal University of Goias, Goiânia, Goiás, Brazil*

Brazilian studies have documented an association of humidity with an increase in the proportion of respiratory symptoms. However, they were based on secondary data, raising concerns of validity and reliability.
The goal of this study was to evaluate the relationship between the climatic seasonality and the proportion of respiratory symptoms on subjects attending an out-patient primary health unit during each season at a Brazilian city with tropical weather.
It was a cross-sectional study on subjects attending an primary health unit in relation to meteorological data daily collected. During one year, 48 observations divided by season were made.
Among 3409 subjects, 15% presented with respiratory symptoms. This paper identifies the association of low levels of humidity and precipitation coinciding with an increase in the number of subjects with respiratory symptoms on winter.



ANOVA test shows a significant difference between winter and spring (p=0.02).There was significant negative correlation between the number of patients with respiratory symptoms and the mean of previous three days minimum relative humidity (p=0.002). An ARMAX model shows a statistically significant coefficient (p>0.0001).
These findings suggest that at a Brazilian city with tropical weather, the proportion of respiratory symptoms on subjects attending a primary health unit is increased with the reduction of relative air humidity.

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A study of the words used by patients and physicians to express asthma symptoms and daily activities limitations in primary care – The "Asthma Languague" study

Mina Gaga[1], Eleftherios Zervas[1], Konstantinos Kostikas[2], Stelios Loukides[2], Petros Bakakos[3], Elena Panitti[4], Nikos Nikas[4]. *[1]7th Respiratory Medicine Dept and Asthma Centre, Sotiria Hospital, Athens, Greece; [2]2nd Respiratory Medicine Dept University of Athens Medical School, Attiko Hospital, Athens, Greece; [3]3rd University Dept of Respiratory Medicine, Sotiria Hospital, Athens, Greece; [4]Medical Dept, AstraZeneca SA, Athens, Greece*

Intoduction: Expression of symptoms and daily activities limitations is a core element in physician-patient dialogue in asthma management.
Aim: To identify the words most frequently used by physicians and patients to express asthma symptoms and limitations of daily activities, and to assess the patient-physician concordance regarding these words.
Methods: The "Asthma Language" study (NCT00986219) (descriptive, cross-sectional survey) enrolled patients with asthma receiving ICS-based treatment for ≥ 6 months. Investigators and patients chose up to 4 words from 2 lists (a symptoms and a daily activities limitations list) identical for patients/physicians. Furthermore, patients completed the ACQ-5.
Results: 695 patients (F: 57%, age 46.8±14.8 years) were enrolled. Time since diagnosis was 12.9±9.4 years. Treatment with ICS/LABA±LTRA was reported by 82% of patients. ACQ-5 score was 1.5±1.1. The words most frequently used to express asthma symptoms were "cough", "dyspnoea" and "wheezing" (35%-56%), while those used to express activities limitations were "stairs climbing" "fast walking" and "uphill walking" (40.5%-53%). In terms of word concordance regarding expression of asthma symptoms and activities limitations, full concordance was observed in 4.3% and 19.1% and partial concordance in 75.4% and 74.9%, respectively. By grouping the words expressing the same symptom, full concordance was observed in 21.7% and partial concordance in 72%.
Conclusions: This study showed that there is a discordance regarding physician-patient communication in terms of the words used to express symptoms and daily activities limitations caused by asthma.

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Facilitation of optimal asthma management to radically influence health policy in primary care in Ireland

Jean Holohan[1], Louis Coyne[1], Francis Guiney[1], Pat Manning[2], Basil Elnazir[3], Eamonn Shanahan[4], Terry O'Connor[5], Muireann Ni Chroinin[6], Netta Williams[7], Rhonda Forsythe[7], Pamela Logan[8]. *[1]Research and Education, Asthma Society of Ireland, Dublin 1, Ireland; [2]Respiratory, HSE Regional Hospital Mullingar, Mullingar, Co. Westmeath, Ireland; [3]Paediatric Respiratory/General Medicine, Adelaide and Meath National Children's Hospital, Tallaght, Dublin 24, Ireland; [4]General Practice, Farranfore Medical Centre, Farranfore, Killarney, Co. Kerry, Ireland; [5]Respiratory, Mercy University Hospital, Grenville Place, Cork, Ireland; [6]Paediatric Respiratory, Cork University Hospital, Wilton, Cork, Ireland; [7]Professional Development Coordinator for Practice Nursing, Health Service Executive Dublin North East, Swords, Co. Dublin, Ireland; [8]Director of Pharmacy Services, Irish Pharmacy Union, Dublin 14, Ireland*

Prior to the initiation of this program guideline based care was not prioritised by health policy. Asthma control is sub-optimal in Ireland; recent primary care data shows 14% of asthma patients attended A&E, 8% hospitalised in the previous 12 months.
The Asthma Society of Ireland (ASI) developed a framework for the Dept. of Health and Health Service Executive (HSE) in collaboration with Healthcare Professional (HCP) bodies based on nationally modified guidelines (GINA) and a core program to assess the feasibility of implementing a National Asthma Program.
The ASI funded and developed an asthma management program in primary care to identify barriers and facilitators to implementation of guideline based care. 25 primary care teams completed a guideline based educational program and practical training session. Each team was given a tool-kit with spirometer, peak flow meters and diaries, patient education materials, placebo inhalers and spacers. Adherence to guidelines was facilitated with a specifically developed Electronic Patient Record. 778 patients were included in the program for 6 months.
A guideline based asthma program can be implemented successfully if practices are provided with necessary resources for diagnosis, management and patient education. HCP agreed guidelines improved patient care (92.7%), facilitated cost effective care (70.7%). Arising from this study HSE has prioritised the development of a National Asthma Program with asthma specific key performance indicators in its service plans.
Active collaboration between patient organisations, HCP and health service providers has lead to a fundamental change in asthma health policy in primary care.

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Does oxygen prescription on discharge lead to a decrease in re-admission rates in chronic obstructive pulmonary disease (COPD)?

Rifat Rashid[1], Cathryn Steeley[2], Biman Chakraborty[3], Yasmin Khan[1], Shiva Bikmalla[1], Rahul Mukherjee[1]. *[1]Department of Respiratory Medicine & Physiology, Birmingham Heartlands Hospital, Birmingham, United Kingdom; [2]Lung Improvement Board, Birmingham East & North Primary Care Trust, Birmingham, United Kingdom; [3]School of Mathematics, University of Birmingham, Birmingham, United Kingdom*

Introduction: A previous survey highlighted a very high degree of physiologically unnecessary home oxygen use in COPD patients (Bhattacharya M, Potter A, Mukherjee R. Assessing for Long Term Oxygen Therapy (LTOT) in an English town. *Am J Resp Crit Care Med* 2008;177:A665). A common reason for the unnecessary use is that hospital physicians discharge COPD patients with home oxygen pending physiological assessment in the hope of preventing future hospital admissions, which we set out to examine.
Methods: A retrospective review of COPD admissions and re-admissions of Birmingham East and North Primary Care Trust patients from April 2007- November 2010 based on International Classification of Diseases coding (J44); Welch's 2-sample t-test was applied to assess the significance of the difference in the admission rates of the 2 groups of COPD patients who receive and did not receive LTOT on discharge.
Results: A total of 1942 patients were eligible of which 295 received LTOT on discharge. The mean annual admission rate in the LTOT group was 3.18 and 1.67 in the other ($p<0.00000000001$).

LTOT prescription on discharge

	LTOT prescribed	No LTOT prescribed
No of patients	295	1647
No of episodes	937	2745
Mean number of episodes per patients	3.18	1.67

Statistics: two-sample Welch's t-test: p value = 1.8×10^{-12}.

Conclusion: LTOT prescription on discharge is actually associated with a significant increase in re-admission to hospital of COPD patients. Further studies including controlling the admission rate for disease severity are necessary. Continuing to widen the provision of integrated multidisciplinary oxygen assessment services also seems to be reasonable.

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Possible cut-off values for stable or instable COPD as measured by the clinical COPD questionnaire (CCQ)

Maarten Prinsen[1], Ellen Van Heijst[2], Siebrig Schokker[1], Corina de Jong[1], Roland Riemersma[1], Jan Willem Kocks[1], Thys van der Molen[1]. *[1]Department of General Practice, University Medical Center Groningen, Groningen, Netherlands; [2]Asthma and COPD Service, LabNoord, Groningen, Netherlands; [3]Groningen Research Institute for Asthma and COPD, University Medical Center Groningen, Groningen, Netherlands*

Background: Based on GINA the cut-off values for the Asthma Control Questionnaire (ACQ) have been established for "well-controlled" and "not well-controlled" asthma. Cut-off values for health status questionnaires like the Clinical COPD Questionnaire (CCQ) for use in COPD, however, are lacking.
Objective: To give insight into possible cut-off values of the CCQ by comparing it with the ACQ.
Method: In 7599 patients with respiratory disease, referred by the general practitioner to a diagnostic center, data on both the ACQ and CCQ were collected. Scores on both questionnaires were compared and possible cut-off values for the CCQ were determined by using the ACQ as gold standard.
Results: After consultation with the diagnostic center, a diagnosis of COPD, asthma or a asthma/COPD was established in respectively 16,8%, 46,3% and 7,4% of the patients. The correlation between the ACQ and CCQ was 0.81. The mean ACQ and CCQ scores in these patients according to the level of control are presented in table 1.
Discussion: The average CCQ per ACQ-score has been calculated and using the ACQ as gold standard this study estimated the cut-off points for the CCQ to be <1 for COPD with stable disease and >1.7 for COPD with instable or uncontrolled disease.

Mean ACQ and CCQ scores per diagnosis selected by ACQ cut-off values

ACQ Cut-off	Diagnosis		ACQ average	CCQ average
<0.75	COPD	Mean	0.31	0.69
		n	450	444
	Asthma	Mean	0.32	0.63
		n	1158	1148
	Asthma/COPD	Mean	0.35	0.66
		n	167	166
0.75–1.50	COPD	Mean	1.07	1.39
		n	358	353
	Asthma	Mean	1.08	1.31
		n	909	902
	Asthma/COPD	Mean	1.07	1.28
		n	164	163
>1.50	COPD	Mean	2.17	2.34
		n	462	455
	Asthma	Mean	2.23	2.25
		n	1441	1428
	Asthma/COPD	Mean	2.26	2.30
		n	229	226

P693

Experiences of establishing a new community based oxygen service

Denise Williams, Nicola Stevenson, John Corless. *Dept of Respiratory Medicine, Wirral University Teaching Hospital, Wirral, Merseyside, United Kingdom*

The Wirral has a population of 350 000. We have high rates of lung disease. The prevelence of COPD is 2.3% and we diagnose approximately 300 new lung cancers each year. Many individuals are in receipt of home oxygen therapy. Prior to 2009 there was no no local provision for structured assessment or follow up of patients in receipt of oxygen within our area.
In October 2009 we opened a new community based oxygen service for the provision of oxygen. All new community and secondary care initiated oxygen prescriptions are supervised by our service. Primary care precribing data in September 2009 indicated that there were 1079 active oxygen prescriptions. These data contained numerous inaccuracies. We later confirmed that there were 800 adult patients receiving oxygen in our area. The mean age was 74 (range 17-100), 52 were female. Approximately 50% are in receipt of formal long term oxygen therapy and 50% have "short burst" oxygen.
445 scripts were issued by respiratory specialists, 285 by general practitioners, 70 unknown.
To date we have reviewed over 650 of the original 800 patients and see >20 new referrals each month. Our experience is that many historical oxygen prescriptions were not clinically indicated (based on UK guidelines). We have reduced spending on Oxygen from £51 000 per month in Sept 09 to £44 000 per month currently.
We have ongoing concerns about how best to risk assess patient in terms of potential of fire and falls. We are participating in the UK National Lung Improvement Program and are investigating how best to engage with primary care colleague and patients. We are also studying how to deal with patients who refuse to have oxygen withdrawn even when it is clinically indicated.

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Body mass index and quality of life in patients with asthma

Galina Sergeeva, Alexander Emelyanov. *Department of Allergy and Lung Diseases, Medical Academy for Postgraduate Studies, Saint-Petersburg, Russian Federation*

Background: We examined the effect of overweight and obesity on quality of life in patients with asthma.
Methods: Two hundred out-patients with asthma (aged 18 - 80 yrs, mean age 55 yrs, 33% males) were divided into 3 groups: with normal body mass index (BMI<25), overweight (25≤BMI<30) and obese (BMI≥30). Quality of life was measured by using Russian version of St.George's Respiratory Questionnaire (SGRQ).
Results: Fifty eight percent of males and in 69% of females with asthma had BMI≥25: 35% of males and females were overweight and 23% males and 34% females were obese. BMI in males was 26.8±0.62, in females – 28.9±0.55 ($p<0.05$). Correlation of age and BMI was significant only in males ($r=0.35$, $p<0.05$). The relationship between BMI and Symptom score was not determined. BMI in patients with asthma was mainly associated with Activity score ($r=0,22$, $p<0.05$), both in males ($r=0,27$, $p<0.05$) and in females ($r=0,22$, $p<0.05$), with Impact ($r=0.17$, $p<0.05$) and Total score ($r=0.19$, $p<0.05$). In patients with BMI<25 and in those with BMI≥25 the differences of Activity (39.7±3.38 vs 49.3±2.05, $p<0.01$) and Impact scores (29.9±2.64 vs 36.9±1.82, $p<0.05$) were significant. We did not reveal any relationship between normal BMI and SGRQ scores in patients with asthma. Overweight and obesity were associated with Activity ($r=0,20$, $p<0,05$) and Total score ($r=0,17$, $p<0.05$). In asthmatic males the relationship between BMI≥25 and SGRQ Activity score ($r=0,41$, $p<0.05$), Impact score ($r=0,33$, $p<0.05$) and Total score ($r=0,37$, $p<0.05$) were determined.
Conclusion: Obesity and overweight are frequently associated with asthma. There was a significant correlation between BMI≥25 and Activity, Impact and Total items of SGRQ.

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Relation between quality of life and morbidity and mortality in COPD patients: 7-year follow-up study

Yavuz Havlucu[1], Arzu Yorgancioglu[1], Aysin Sakar Coskun[1], Gonul Dinc Horasan[2], Tugba Goktalay[1], Pinar Celik[1]. *[1]Chest Disease, Celal Bayar University Medical Faculty, Manisa, Turkey; [2]Public Health, Celal Bayar University Medical Faculty, Manisa, Turkey*

In this study, relationship between pulmonary function test (PFT) and quality of life (QoL) and effect of QoL on prognosis, mortality,and morbidity were investigated in patients with COPD.

In this prospective study, 251 patients with COPD as defined by ATS criteria were included. 218 patients (86.85%) were male and mean age was 65,55. PFT and QoL questionnaire, St. George Respiratory Questionnaire (SGRQ), were performed at the begining. During 7 year follow-up, first exacerbation day, number of exacerbation, number and duration of hospitalization, number and duration of hospitalization in intensive care unit, number of entubation, and exitus day were recorded. 195 patients (77,6%) were died during follow-up. 112 patients (57%) were died due to respiratory reasons. When the begining parameters of dead patients and survived patients were compared, there was a statistically difference according to comorbidity especially cardiac disease, disease duration, PFT parameters, and SGRQ score ($p<0.05$). Also number of exacerbation before study and first exacerbation day during study were related with mortality ($p<0.05$). When the correlation between FEV_1 values, SGRQ scores and parameters mentioned above were investigated, there was significant correlation between these parameters and this correlation was more significant in SGRQ scores than FEV_1 values.
As a result, not only PFT but also quality of life questionnaires are useful in determining the prognosis of COPD, for this reason health questionnaires provide a valid and standardised estimate of the overall impact of COPD and should be used to complement spirometric measurements of baseline assessment of patients in routine practice.

P696

The impact of "specialized COPD outpatient clinic" in patient outcomes – A prospective cohort study in a Hong Kong government hospital

Hoi Nam Tse[1], King Ying Wong[2], Kwok Sang Yee[1], Ka Yan Wai[1]. *[1]Medical Department, Kwong Wah Hospital, Hong Kong, Hong Kong; [2]TB and Chest Unit, Wong Tai Sin Hospital, Hong Kong, Hong Kong*

Introduction: A highly specialized COPD outpatient clinic, run by respiratory specialists, can provide comprehensive and updated service to COPD patients and may reduce their exacerbation/hospitalization rate.
Aim: To evaluate the impact of "specialized COPD clinic" on various patient outcomes
Methods: Patients with spirometry-confirmed COPD and history of at least one episode of exacerbation in past one year were referred to the new specialized clinic. GOLD guideline was strictly adhered. Education was provided by respiratory nurses with provision of written action plan for exacerbation of symptoms. Outreach physiotherapy was provided for selected patients. Outcome measurements including lung function test, St George respiratory questionnaire (SGRQ), were done at baseline and 6-month follow up. The exacerbation and admission rate were also recorded.
Results: Totally, 117 patients had been followed up. They had a mean age of 70.3±8.5;%FEV1 54.3±21.4; SGRQ total score 35.6±18.9 and a baseline exacerbation and admission rate 3.3±3.2 and 1.4±1.7 per year respectively in past one year.
At 6-month follow up, patients' quality of life improved significantly with SGRQ total score reduced from 35.6±18.9 to 28.4±16.6 (RMANOVA test, p=0.018). There was also a 66% reduction in both exacerbation and admission rate. The exacerbation rate reduced from 3.3 to 1.1episode/year (0.79 episode per 9 months) while the admission rate decrease from 1.4 to 0.47episodes/year. (0.35 episode per 9 months)
Conclusion: The specialized COPD clinic significantly reduces exacerbation and admission rate in COPD patients as well as improves their quality of life.

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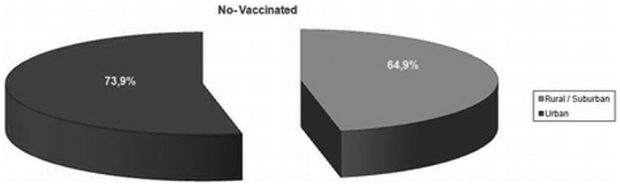
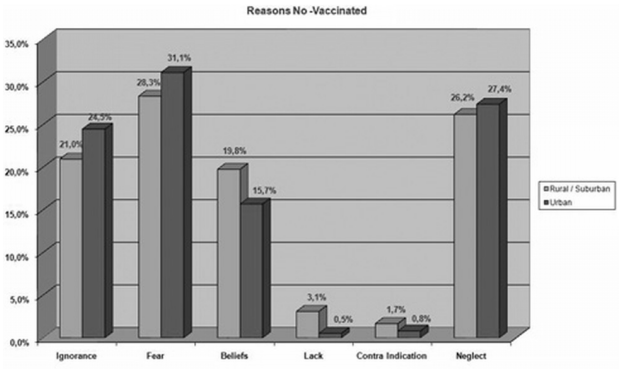
The percentage of influenza vaccination in urban and suburban high risk population in western Greece during the year 2010

Dimitra Sereti, Theodosios Theodosiou, Konstantina Sereti, Maria Petta, Maria Petta. *General Practice, Vardas Health Center, Varda, Ilias, Greece General Practice, Chalandritsas Health Center, Patras, Achaias, Greece General Practice, Chalandritsas Health Center, Patras, Achaias, Greece General Practice, Chalandritsas Health Center, Patras, Achaias, Greece*

Aim: To estimate the percentage of immunization against influenza.
Method: 1156 high risk patients were asked for having or not having done the influenza vaccine. They were also, asked for the reasons which made them not to be vaccinated.
Results: 227 patients (35,1%) from the rural and suburban were vaccinated and 133 (26,1%) from the urban.



The reasons for no vaccination were fear, ignorance, personal beliefs, neglect, contraindications and lack of vaccine or difficulty in access.
The vaccination was carried out by family physicians in 65,6% of the rural and suburban population and in a 53,4% of the urban.



Conclusion: People from rural and suburban areas are more immunizated against influenza compared with those from urban. Apart from the contra-indications, there are other reasons that influence the influenza vaccination of the population. The participation of the family physicians in rural population's vaccination indicates the quality of the direct relationship between doctor and patients and probably is the main cause for the low percentages of fear, ignorance or neglect about the vaccine against influenza.

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Influenza vaccination programme – Are the UK government incentives working?

Mohammad Paracha[1], Rizwan Ahmed[2], Mohammad Salahuddin[3]. *[1]Student in the Faculty of Medical Sciences, Newcastle University, Newcastle-upon-Tyne, United Kingdom; [2]Respiratory Medicine, Leeds Teaching Hospitals NHS Trust, Leeds, United Kingdom; [3]General Practice, Gladstone Medical Centre, Birkenhead, United Kingdom*

Background: Influenza A (H1N1) virus has spread globally in recent years. The UK government recommends all people in high-risk groups (all >65 yrs old, people with chronic diseases, the immunocompromised, carers, healthcare workers & pregnant women) be vaccinated against H1N1. Pregnant women are four times more likely to be hospitalised due to the virus as compared with non-pregnant women [1]. The rate of H1N1 hospitalisation among children is also significantly higher compared to those over 65 years old [2]. General practices in the UK are given financial incentive to achieve >70% uptake in high-risk groups.
Methods: We retrospectively reviewed vaccination uptake amongst the high-risk population in two practices in different regions of the UK for winter 2010/11. Both practices use the computer input software (EMIS). The programme Population Manger was used to retrieve the uptake data.
Results: Both surgeries are achieving the required national target, practice A: 75% (1502/1998) & practice B: 73% (917/1250), hence received full financial incentive. However, both practices have a very low uptake in under 16 year olds, practice A: 35% (27/78) & practice B: 40% (21/52) and among pregnant women, practice A: 40% (12/30) & practice B: 14% (4/28).
Conclusion: Incentives for the vaccination programme should be revisited so that all the sub groups of high-risk population, including those most at risk of complications and hospital admissions, achieve the same high level of immunisation.
References:

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Asthma control and quality of life: 6-month follow-up of PRISMA study (PRospectIve Study on asthMA control)

Luigi Allegra, Giovanni Cremonesi, Giuseppe Girbino, Eleonora Ingrassia, Serafino Marsico, Gabriele Nicolini, Claudio Terzano. *Thoracopulmonary Department, University of Milan, Fondazione IRCCS Ospedale Maggiore Policlinico-Mangiagalli-Regina Elena, Milan, Italy Medical Affairs, Chiesi Farmaceutici, Parma, Italy Institute of Respiratory Medicine, University of Messina, Messina, Italy Medical Affairs, Chiesi Farmaceutici, Parma, Italy Department of Respiratory Medicine, Azienda Ospedaliera Monaldi, Second University of Naples, Naples, Italy Medical Affairs, Chiesi Farmaceutici, Parma, Italy Respiratory Diseases Unit, Department of Cardiovascular and Respiratory Sciences, "Sapienza" University of Rome, Rome, Italy*

Rationale: According to GINA guidelines, asthma control is the goal of the treatment.
Objectives: To estimate the percentage of controlled asthmatic patients and their quality of life.
Methods: Adult asthmatics with not-well controlled asthma (Asthma Control Test score≤19) were involved in a prospective observational study. Asthma control and quality of life were assessed with ACT and EuroQoL-5D, respectively.
Results: 735 patients were evaluated. Figure 1 shows the distribution of asthma

control at enrolment visit and after 6 months. As compared to the first visit, 70.1% of uncontrolled and 80.0% of partly controlled reached asthma control.
The mean (SD) of EuroQoL score was 0.72 (0.2) at first visit and 0.84 (0.2) at 6-month follow-up visit. The mean (SD) of VAS was 65.0 (16.1) at first visit and 77.1 (13.6) after 6 months. Figure 2 shows the EuroQoL score and VAS stratified for control level.

Figure 1

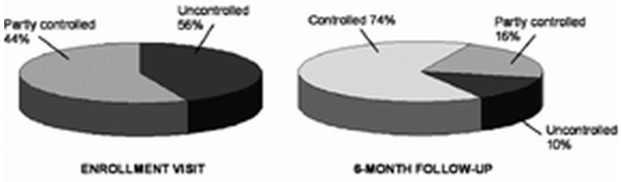
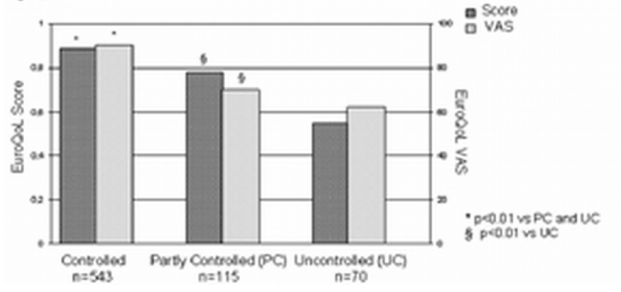


Figure 2



Conclusions: Improvements in asthma control and quality of life can be detected in the majority of non-controlled patients after 6-month follow-up in a real life setting.

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Impact of therapy reviews in real-world asthma

David Price[1,2], John Haughney[1], Dermot Ryan[3,4], Iain Small[5], Kevin Gruffydd-Jones[6,7], Alison Chisholm[2], Stanley Musgrave[2], Naheem Munir[2], Federico Lavorini[8], Alberto Papi[9]. *[1]Centre of Academic Primary Care, University of Aberdeen, Aberdeen, United Kingdom; [2]Observational Research, Research in Real Life, Norwich, United Kingdom; [3]General Practice with Specialist Interest in Respiratory Medicine, Woodbrook Medical Centre, Loughbourgh, United Kingdom; [4]Honorary Clinical Fellow, University of Edinburgh, Edinburgh, United Kingdom; [5]General Practice with Specialist Interest in Respiratory Medicine, Peterhead Health Centre Forrest Road, Peterhead, United Kingdom; [6]General Practice with Specialist Interest in Respiratory Medicine, Box Surgery, Box, United Kingdom; [7]Department for Health, University of Bath, Bath, United Kingdom; [8]Department Internal Medicine, Section Respiratory Medicine, University of Florence, Florence, Italy; [9]Research Centre on Asthma and COPD, University of Ferrara, Ferrara, Italy*

Rationale: Asthma therapy reviews aim to regain or improve asthma control, reduce side-effects and/or contain costs. Little work has been done using clinical data to evaluate their effect on asthma control.
Objective: Identify therapy reviews in fixed-dose combination inhaled corticosteroid/long-acting beta$_2$agonist (FDC ICS/LABA) asthma patients and evaluate subsequent changes in asthma control.
Method: Utilised the UK's Optimum Patient Care Research Database to identify primary care patients (18–80yrs) with asthma (diagnostic code and/or ≥2 asthma prescriptions in the last yr) treated with FDC ICS/LABA who, following a therapy review, were prescribed beclomethasone dipropionate/formoterol (BDP/FOR; Fostair 100/6μg) at same or lower BDP-equivalent ICS daily dose as their previous ICS/LABA. Proxy asthma control measures were evaluated before (over 1yr) and after (≥90 days follow-up) initiating BDP/FOR, i.e.: *asthma control:* no hospital attendance, admissions, out of hours consultation, outpatient department attendance or admission for asthma; no acute oral steroid prescriptions; no primary care consultations for lower respiratory tract infection, *short-acting beta$_2$agonist (SABA) use*, and *exacerbations:* asthma hospital attendance or Accident & Emergency admission and/or acute oral steroid courses.
Results: 65 eligible patients.

	Before, n (%)	After*, n (%)
Achieved control	45(69)	48(74)
Mean SABA μg/d		
0	42(65)	43(66)
1–199	9(14)	5(8)
≥200	14(22)	17(26)
Exacerbations		
0	49(75)	53(82)
1	9(14)	6(9)
1–2	7(11)	6(9)

*Annualised for <1yr outcome; †p>0.05 for all measures.

Conclusion: These preliminary data suggest initiating BDP/FOR in real-world FDC ICS/LABA patients following a therapy review does not result in a deterioration in asthma control measures.

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Evaluation of COPD treatment success by office-based pneumologists in Germany using the example of tiotropium

Thomas Glaab[1], Axel Kroker[2], Harald Mitfessel[3], Hendrik Schmidt, Heike Rau-Berger[1]. *[1]Medical Affairs, Boehringer Ingelheim Pharma GmbH & Co KG, Ingelheim, Germany; [2]Dept of Pneumology, Pneumology Practice, Koblenz, Germany; [3]Dept of Pneumology, Pneumology Practice, Krefeld, Germany*

Background: In chronic obstructive pulmonary disease (COPD) patients, treatment with the long-acting anticholinergic tiotropium has been associated with clinical benefits in patients.
Aims and objectives: To assess the treatment effect of tiotropium and evaluate the two most important therapeutic outcome parameters from the perspective of office-based pneumologists in Germany.
Methods: Patients received tiotropium (SPIRIVA® HandiHaler® 18 μg or SPIRIVA® Respimat® 5 μg qd) for 6 to 12 weeks in an open-label observational study in 277 pneumology practices. At Visit 2 (Week 6 to 12) pneumologists assessed the success of treatment with tiotropium and determined the two most important outcome parameters for their judgement of therapeutic success. Other endpoints were the concurrent proportion of positive efficacy and tolerability assessments by both physicians and patients.
Results: Of 1264 patients enrolled, 1264 (100%) were evaluable for the primary efficacy endpoint (mean age, 65.3 years; 63.1% men). Rate of therapeutic success was 96.4% (95% confidence interval [CI]: 95.3-97.4%). The most frequently used specific outcome parameters were pulmonary function (49.1%) and exercise capacity (48.9%). Concurrent proportions of positive assessments by both physicians and patients were 88.4% (95% CI: 86.5-90.1%) and 93.4% (95% CI: 91.9-94.7%) with regards to efficacy and tolerability, respectively.
Conclusion: A high proportion of office-based pneumologists rated the treatment with tiotropium as successful based mainly on improvements of pulmonary function and exercise capacity.
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