COPD or Chronic Obstructive Pulmonary Disease is a progressive disease that affects almost 10% of all adults. Currently ranked at number 6 of the WHO’s mortality list, it will be the 3rd cause of death by 2020. Yet, it remains an unknown disease to most people. Invited by EFA, a group of leading specialists, public health experts and national patient representatives, discussed with European policymakers from Parliament and the Commission how to curb the disease burden for the benefits of participants of the medical impact of the disease and available treatment options. COPD leads to a constant degradation of the lung function. As a result, muscles and organs slowly but steadily suffocate. Unlike asthma, COPD is not reversible and the status quo can at best be maintained. Hence prevention and a timely diagnosis plus effective treatment are all the more important. Depending on the severity of the disease, the international GOLD (Global Initiative for Chronic Obstructive Lung Disease) Guidelines suggest cumulative measures such as the “exclusion of risk factors such as smoking” and vaccination against influenza, pharmacological treatment, rehabilitation, long-term oxygen or transplantation. Generally, it is true that the earlier the diagnosis, the less costly the treatment and the greater the quality of life for the patients.

A timely diagnosis was something that Michael Wilken, a COPD patient and independent coach and management consultant from Hannover, Germany, would have wished for as well. Diagnosed with COPD in 2004, he developed the first symptoms of the disease more than 10 years prior to that. As it is, his life is severely impacted by the disease – he cannot walk fast, cannot use stairs and cannot walk for more than 100m, if the temperature is below 5 degrees Celsius. The surprising burden of COPD – a disease which hits at a variety of ages

However, COPD does not only have a severe impact on the patients themselves, but also has significant repercussions on their family, their working environment and society at large, as Monica Fletcher, Chair of the European Lung Foundation and lead author of “COPD uncovered”, a study which investigates the economic burden of COPD, explains. Monica firstly dispelled the myth that COPD only affected elderly men of low socioeconomic status. Equal numbers of women are now being diagnosed as men due to the increase in female smoking prevalence. In fact, COPD affects just as many people under 65 years of age than over 65 years of age, in particular the 40 to 65 year olds, an age group which is otherwise at the peak of its economic and social productivity. In the UK, this group earns two thirds of the total national pay. Furthermore, many of these also take care of elderly parents and give financial assistance to their children. COPD, however, severely hampers this productivity – quantifiable as EUR 32.8 billion in work days lost across Europe. It is all the more alarming therefore that so many patients live in complete ignorance of their condition. In England, for example, 900 000 people are known to have COPD but the estimated prevalence however is between 2.7 to 3 million. This is another impressive proof point for how important prevention and disease awareness are.

The surprising burden of COPD – a disease which hits at a variety of ages

Early diagnosis means more treatment options and greater cost-effectiveness

Prof. Ronald Dahl, former President of the European Respiratory Society, informed patients and society at large. The first of two workshops in the European Parliament took place on 29 June and focused on prevention and diagnosis. It was hosted by Sean Kelly MEP and supported by MEPs Eva-Britt Svensson, Catherine Stihler and Francoise Grossetête.

Right to left: G. Kogan; DG Research; S. Kelly MEP; B. Flood, EFA

“Access to diagnosis differs greatly throughout Europe. The EU should use its strong mandate to identify and promote best practice and to help eradicate these health inequalities” (B. Flood)
No smoking: The most effective preventive measure against COPD

Active and passive smoking is by far the greatest risk factor for developing COPD. Consequently, smoking cessation is the most effective treatment for early COPD, as Ronald Dahl puts it. With smokers frequently developing a high degree of addiction, it is regrettable that smoking cessation programmes are not adequately supported and healthcare professionals who help smokers fight their addiction are not reimbursed for their efforts. Health promotion programmes run by employers can also add value. Ronald Slootweg, Director of Health Services of Dow Benelux, illustrated his company’s efforts to prevent smoking amongst Dow’s workforce. Measures include a non-tobacco day in all plants around the world and rewards for employees for not smoking; the availability for smoking cessation programmes. Furthermore, as of 1 January 2010, the Dutch plant is smoke-free, meaning that employees need to leave the site of the plant if they want to smoke.

As far as tobacco labeling is concerned, experts generally applauded EU policymakers for having adopted such rigorous legislation in this field. However, they also recommended explicitly mentioning COPD on packs as a fatal and debilitating lung disease, with a view to raising the awareness of the wider public of this rather unknown disease.

Irrespective of the importance of smoking cessation, however, it has to be clear that even if all smokers were to quit smoking immediately, COPD would still be prevalent for several decades, as Monica Fletcher pointed out, quoting Professor David Mannino from the University of Kentucky. This is why diagnosis of the disease needs to be significantly improved to stop the disease before costly deterioration for both quality of life of the patient and health expenditure.

Good practice needs to be shared, adjusted and implemented

Another problem which frequently prevents a timely diagnosis of COPD is lack of reimbursement for the spirometry test throughout the EU. Good practice on the contrary is Denmark, where the national Health Board recommends opportunistic screening for COPD for everybody over 35 years of age, who is a smoker, ex-smoker or has been subject to relevant occupational exposure and presents at least one respiratory symptom (dyspnoea, cough, wheeze, phlegm and/or recurrent respiratory infections). The rationale of this recommendation was validated by a study in which roughly 10% of the Danish GPs participated and during which 3095 people were screened. 35% percent of those screened suffered from COPD, 80% of which were diagnosed with a mild to moderate form of the disease. The approach to screening proved cost-effective with an estimated mean of EUR 180 million of annual healthcare costs saved. Unfortunately this recommendation has not yet been implemented.

Widespread use of COPD testing requires collaboration between primary and specialist care, and depends on political will

So why is the rate of diagnosis for people with COPD so low? On the one hand it is surely the lack of perception amongst the patients themselves who frequently only realize that something is wrong when they only have a lung function of 50 percent left. Shortness of breath is frequently assumed to be related to not getting enough exercise or simply getting older.

On the other hand, the problem is also with the general practitioners. Whilst a so-called spirometry test is actually rather simple to undertake, the interpretation of the results can be more challenging. What to do? Dr. Tjard Schermer, from the Department of Primary and Community Care, Radboud University Nijmegen Medical Centre and member of the International Primary Care Respiratory Group (IP-CRG) presented an empirical study where selected GPs were supported in the interpretation of the test results. The best results in terms of accuracy of the diagnosis were achieved through the following GP-specialist cooperations: interpretation by specialists in a lung function lab, a primary diagnostic centre or visiting respiratory nurses.

Right to left: J. Price; C. Stihler MEP; J. Donkers

“I felt that I only really had the choice between giving up smoking and giving up breathing” (M. Wilken)

R. Dahl: “Diagnosis of COPD is absolutely necessary for proper treatment interventions. It is a preventable and treatable disease, making early diagnosis crucial for a patient’s treatment both in terms of options and cost effectiveness. The vast majority of COPD patients are diagnosed unnecessarily late”.
EU Member States which act

Unfortunately such examples of good practice are rare and many EU Member States do not have COPD on their radar screen, as Sharing and Caring, the EFA Handbook on COPD, confirms. However, some countries have recognised the threat and kicked off action. An example is Ireland, which – faced with costs related to COPD of almost EUR 1 billion in 2006 – decided to take action. Professor Tim McDonnell, programme leader for COPD in the Clinical Strategy and Programmes Directorate of the Irish Health Executive presented the cornerstones of the programme with which Ireland aims to significantly reduce its annual COPD related death toll (currently 1400 people die of COPD in Ireland. The true figure is likely to be much higher, however, since many deaths are wrongly classified as caused by pneumonia).

Measures include
- promotion of correct treatment based on best practice guidelines,
- organisation of COPD outreach programmes to reduce COPD admissions,
- increase of patient information
- introduction of nationwide rehabilitation programmes
- improved access to diagnostic spirometry.

Conclusion

As EFA, we hope that many Member States will follow this example and that the EU will facilitate practice in this area to curb the huge economic, social and human burden that COPD presents in time. With this and the following expert work-

Policy Recommendations

- **Prevention**: occupational and passive exposure to risk factors such as smoke needs to be further limited;
- **Smoking cessation**: with a view to promoting smoking cessation,
  - healthcare professionals need to be remunerated for their efforts to help smokers fight their addiction and quit;
  - good practice in employer-led health promotion programmes needs to be promoted and disseminated. Investments into health on behalf of the employer need to be encouraged, the economic benefits of a healthy workforce need to be flagged more strongly.
- **Tobacco labelling**: COPD needs to be mentioned explicitly as a debilitating and fatal lung disease on tobacco packaging, in order to raise awareness of the disease and give a warning to those who smoke.
- **Education of healthcare professionals**: co-operation between those working in primary care and specialists needs to be established with a view to a correct interpretation of lung function test results. Rigorous training needs to be given to those who do not have access to specialist knowledge.
- **Access to spirometry testing** needs to be given to all those at risk. As of the age of 35 years, smokers, former smokers and those with an occupational hazard need to undergo a lung function test, provided they present at least one respiratory symptom (dyspnoea, cough, wheeze, phlegm and/or recurrent respiratory infections).
- **Registration**: establish a register for COPD patients to support evidence based policy-making.

The event was endorsed by the European Respiratory Society (ERS), the European Lung Foundation (ELF) and the International Primary Care Respiratory Group (IPCRG) and supported by unrestricted educational grants from EFA sustainable funding partners Air Liquide Healthcare, AstraZeneca, Boehringer Ingelheim, GSK, Novartis, Nycomed and Pfizer.

T. Schermer: “Testing for COPD seems simple but GPs need support in interpreting the results”

Left to right: E-B. Svensson; S. Kelly MEP; R.Dahl; M. Fletcher

“Society faces a major threat to its productivity, health and welfare as millions of people in their most productive years suffer from COPD” (M. Fletcher)