COPD stands for chronic obstructive pulmonary disease and is the name used to describe a number of conditions, including chronic bronchitis and emphysema. COPD is a progressive disease that makes it hard to breathe, with symptoms that can affect aspects of everyday life. The disease affects around 210 million people worldwide and is projected to be the third leading cause of death globally by 2020. As the condition gradually worsens, even simple tasks like walking up a short flight of stairs can become very difficult. But COPD doesn’t just affect the patients who suffer it. People with the disease often need support from carers such as family and friends to help them live their daily lives.

Although COPD symptoms can be experienced throughout the day, there is a growing body of evidence that those occurring in the morning are common, with a consequent impact on patients’ ability to undertake everyday tasks. This international survey was designed to evaluate the impact of COPD symptoms in the morning on patients’ lives and their ability to perform activities, as well as the support provided by doctors to reduce these physical challenges.

COPD patients from eight countries in Europe, South America, North America and Asia were recruited for the survey. During the selection process, 1,621 people with physician-diagnosed COPD aged 30–70 years were identified. Of these, 1,134 (70%) met the full inclusion criteria of experiencing COPD symptoms in the morning (see below). A final total of 811 patients participated in the survey.

The survey was conducted using a structured questionnaire completed online by patients. The main question areas included diagnosis of COPD, patients’ goals of treatment and discussions with their physicians, symptoms that were worse in the morning and the effects of these symptoms on daily activities in the morning and the rest of the day. The field work was undertaken between 15th April and 13th May 2013. The survey was carried out by Kantar Health and sponsored by Novartis Pharmaceuticals.

Inclusion criteria for participants:

- Diagnosis of COPD verified and confirmed by a physician
- Aged between 30 and 70 years old
- Experienced at least one of the following COPD symptoms to a greater extent in the morning:
  - Shortness of breath
  - Increased cough / coughing up phlegm
  - Increased chest tightness
  - Increased wheezing

### Number of participants by country

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The most common COPD symptoms experienced in the morning among all 811 patients were:

- Cough (in 57% of patients)
- Shortness of breath (in 46% of patients)
- Coughing up phlegm (in 43% of patients)

37% of 811 patients said that COPD symptoms in the morning lasted up to 30 minutes

COPD can have significant effects on patients upon waking and on their ability to carry out activities as efficiently as they could before they began to experience symptoms to a greater extent in the morning.

COPD symptoms in the morning had a significant impact on patients’ ability to undertake a wide variety of activities, most commonly because of shortness of breath

57% of 795* patients said getting up was impacted by COPD symptoms in the morning

59% of 768* patients said using the stairs was affected by COPD symptoms in the morning. A further 20% of 768* patients experienced extreme impact from symptoms and could no longer use the stairs

55% of 738* patients said morning chores were affected by COPD symptoms in the morning

50% of 446* patients who traveled to work said commuting was affected by COPD symptoms in the morning

46% of 745* patients said going shopping was affected by COPD symptoms in the morning

On average, among those patients who experienced an impact from morning symptoms, most routine activities like getting up and using the stairs took 10–15 minutes longer per activity to complete than before they had COPD*

More strenuous activities such as going shopping*, travelling to work* or carrying out morning chores* took 20–30 minutes longer per activity to complete than before they had COPD

* Number of patients varied by activity as data from those patients who reported an impact from symptoms but were still able to undertake the activity and deemed it applicable
30% of 811 patients required extra support from a relative, friend or carer as a result of COPD symptoms in the morning. These patients stated that their ‘non-professional’ carers often had to make changes to their own routines in order to provide them with assistance.

49% of 811 patients said they had changed their morning routine (excluding work activities) as a result of COPD symptoms in the morning. These 394 patients adopted coping strategies such as:
- Waking up earlier (59% of patients)
- Avoiding stairs in the morning (56% of patients)

54% of 811 patients said their routines were affected throughout the day because of COPD symptoms in the morning. These 439 patients adjusted their routines by approaches such as:
- Avoiding commitments before a certain time (33% of patients)
- Avoiding morning appointments at all (26% of patients)

COPD symptoms in the morning were a substantial challenge to patients who worked. 63% of 482 patients in employment felt their COPD symptoms in the morning affected their working day. Out of the 304 patients affected throughout the day:
- 60% had experienced an impact on their morning schedule
- 54% were less productive in the morning
- 55% were no longer prompt for work

24% of 482 patients in employment said they had even had to change jobs or careers as a result of their COPD symptoms in the morning.

In physician-patient discussions there was little emphasis on how treatment could improve the ability of patients to carry out daily living activities in the morning. 76% of all 811 patients had discussed COPD symptoms in the morning with their physician. 76% of 798* patients who were on medication for their COPD cited an improvement in breathing in general as a treatment goal. An improved ability to carry out morning activities was cited by 33% of 798* patients who were on medication as treatment goals from their COPD therapy.

The survey suggested that patients may consider the practical problems caused by COPD symptoms in the morning to be a bigger challenge than the symptoms themselves. 92% of 798* patients on medication reported that physicians were much more likely to discuss how a COPD treatment may improve or reduce symptoms than discuss how it may help improve their ability to carry out morning activities.

COPD symptoms in the morning had a social impact. 53% of 811 patients said COPD symptoms in the morning caused them social inhibition or embarrassment. 46% of 757* patients reported that shortness of breath impacted their ability to talk with others.

* Number of patients varied by activity as data from those patients who reported an impact from symptoms but were still able to undertake the activity and deemed it applicable.
Survey Conclusions

- COPD symptoms in the morning affect patients’ everyday lives – **physically, psychologically and socially**
- COPD symptoms in the morning can influence the ability of patients to carry out **activities**... and their effects can **impact the entire day**
- Patients may develop **coping strategies** in an attempt to limit the effects of COPD symptoms in the morning on their daily lives e.g. **changing the schedule** they followed before COPD symptoms in the morning appeared
- Based on the results of the survey, we can conclude that COPD symptoms in the morning can have very **serious work-life implications**, forcing reduced working hours and even a change of job or career
- There is a **disconnect** between what patients and doctors see as the goal of treatment, with physicians focusing on **symptom control** rather than improvements in patients’ physical ability to **perform tasks and remain active and productive**; a key goal of medications for many patients

References