

Climate Change Threatens Respiratory Patients' Quality of Life Stretching Beyond Physical Health to Overall Well-Being, New Report Warns

- A new survey, part of a report published by Economist Impact and supported by Chiesi, focuses on how respiratory patients experience the adverse effects of poor air quality.
- The report, result of a scoping literature review and survey, recognizes that climate-related factors have a significant impact on lung health and calls for holistic health policy solutions.
- Findings reveal poor air quality can act as a barrier to activities that improve patients' wellness: more than half of patients living in areas with poor air quality avoid outdoor exercise and social engagement.
- Work and job security concerns arise due to respiratory diseases, unaffected by income disparities.
- Chiesi will discuss the report's findings with a panel of health and climate policy experts at a roundtable event in Milan.

Milan (Italy), September 7, 2023 – On International Day of Clean Air for Blue Skies, a new report from Economist Impact titled *"Cleaner air, clearer lungs, better lives: exploring the intersection of air quality, health inequalities and lung health¹"* unveils fresh insights into the interplay between air quality, lung health, and socioeconomic disparities.

The report is supported by Chiesi Group, the international, research-focused biopharmaceuticals group specialising in respiratory health solutions. Chiesi is also gathering today a panel of healthcare professionals, environmental scientists, and patients' associations at an event in Milan titled *"Patient Perspectives on the Impact of Climate Change on Respiratory Wellbeing"*, where the main findings of the report will be presented. By focusing on those suffering from the effects of the climate crisis on their health, Chiesi wants to help prevent this major health threat and promote a greater understanding and collaboration between sustainability and health experts.

By delving on the experiences of people with lung diseases in five key countries (UK, Italy, Spain, Germany, and France), the Economist Impact survey and accompanying literature review suggests that climate-related factors have a significant impact on their quality of life, stretching beyond physical health to overall well-being. It also explores how this impact may interact with other social determinants like education, income, and overall socio-economic status, and calls for holistic health policy solutions.

Based on these findings, Chiesi will put forward the following policy recommendations at the event:

- Recognise the impact of climate-related factors such as heatwaves and increased pollen load on the overall quality of life of respiratory patients, beyond lung health;
- Anticipate that climate change may further exacerbate these issues and therefore create holistic climate-related health policies;
- Address the unique needs of respiratory patients within broader climate adaptation and health equity strategies focusing on: educating the public about the impact of climate change on respiratory health; improving equitable access to health care; and providing tailored support to people with respiratory diseases during extreme weather events;
- Encourage key players along the healthcare value chain to adopt sustainable practices that reduce their environmental impact and promote respiratory health;
- Facilitate collaboration and promote further dialogue among healthcare providers, environmental experts, industry, community representatives, and patient advocacy groups.

¹ Economist Impact. Cleaner air, clearer lungs, better lives: exploring the intersection of air quality, health inequalities and lung health. London: Economist Impact, 2023. Available from: <https://impact.economist.com/perspectives/health/cleaner-air-clearer-lungs-better-lives>

This will allow respiratory policies to be informed by diverse perspectives, culturally sensitive, and effective in mitigating the adverse effect of climate change on respiratory health;

- Prioritise research that examines the intersection of respiratory health and climate change, including specific risks, vulnerabilities, and adaptation strategies for individuals with respiratory conditions.

"When policy is being made on lung health, too often the perspectives of people living with lung conditions are ignored. This paper elevates the issues of lung health, air quality and health inequalities through the eyes of patients living with lung conditions to help shape more effective lung health policies," commented **Gerard Dunleavy, Senior Consultant at Economist Impact**.

Despite overall improvements in air quality in the five countries², air pollution remains a major health concern for Europeans³. This was confirmed by the perception of survey respondents, with 69% saying they believe it has worsened in the last five years. When asked to indicate the main causes of air pollution, over 40% pointed to factors related to climate change, namely extreme weather events like heatwaves and increased pollen levels.

"The climate crisis is also a health crisis. The report reinforces the need to include patients' perspectives and real-life experiences when assessing the interconnected elements of patients' welfare and when developing solutions," said **Carmen Dell'Anna, Head of Global Medical Affairs at Chiesi Group**. *"Policymakers must consider that both climate-related and socio-economic factors interplay and can have an impact on patients' health and wellbeing. We at Chiesi are committed to fostering enhanced comprehension and clear actions on environmental determinants of respiratory diseases, beyond the treatment of their symptoms."*

The perceived impact of poor air quality is noticeably higher in cities than in the countryside. Among respondents in urban centres, 35% say that it has affected their symptoms a great deal and only 5% not at all. Respondents from urban areas are also more likely to find that travelling to work, exercising outdoors and indoors, and simply being at home makes their lung condition worse.

"The Ella Roberta Foundation believes in a world where everyone can breathe air that is free from toxic pollution, regardless of where they live, their economic status, or their ethnic background. We're seeing unlawful levels of air pollution in Europe and the report further shows why we must push this up the policy agenda. Air pollution kills – but it doesn't have to be that way. The coroner in Ella's case was clear that unless the government cleaned up the air children like Ella will continue to die," added **Rosamund Adoo-Kissi-Debrah, President of the Ella Roberta Foundation**, one of the panelists at today's event.

Beyond physical health, air quality also puts a strain on patients' general well-being. Patients who live in areas of poor air quality are more likely to be concerned about their health worsening than those living in areas of good air quality (44% vs 28% respectively). Poor air quality can be an additional barrier to improving patients' health: over half of respondents from low air quality settings report avoiding outdoor activities, whether exercise or social, that could have a positive impact on their well-being.

"It's astonishing that preventable deaths continue to claim lives in this century. The burden of lung diseases and chronic respiratory diseases (CRDs) is on the rise because of poorer air quality caused by air pollution, which is in turn aggravated by climate change. Addressing the wider implications of the climate crisis on air quality is crucial. Dialogue will be key to diagnosing, treating, and preventing respiratory illnesses. Preventing these diseases is more important than

² Economist Impact. Cleaner air, clearer lungs, better lives: exploring the intersection of air quality, health inequalities and lung health.

London: Economist Impact, 2023. Available from: <https://impact.economist.com/perspectives/health/cleaner-air-clearer-lungs-better-lives>

³ European Environment Agency. Europe's air quality status 2022. Copenhagen: European Environment Agency, 2022. Available from: <https://www.eea.europa.eu/publications/status-of-air-quality-in-Europe-2022>

treating them," concluded Arzu Yorgancioğlu, President of the Global Initiative for Asthma (GINA), also speaking at today's event.

Contacts for media:

Alessio Pappagallo

Press Office Manager

Tel: +39 339 5897483

Email a.pappagallo@chiesi.com

About Chiesi Group

Chiesi is an international, research-focused biopharmaceuticals group that develops and markets innovative therapeutic solutions in respiratory health, rare diseases, and specialty care. The company's mission is to improve people's quality of life and act responsibly towards both the community and the environment.

By changing its legal status to a Benefit Corporation in Italy, the US, and France, Chiesi's commitment to create shared value for society as a whole is legally binding and central to company-wide decision-making. As a certified B Corp since 2019, we're part of a global community of businesses that meet high standards of social and environmental impact. The company aims to reach Net-Zero greenhouse gases (GHG) emissions by 2035.

With over 85 years of experience, Chiesi is headquartered in Parma (Italy), operates in 31 countries, and counts more than 6,500 employees. The Group's research and development centre in Parma works alongside 6 other important R&D hubs in France, the US, Canada, China, the UK, and Sweden.

For further information please visit www.chiesi.com

About the report:

Economist Impact, supported by Chiesi Group, set out to better understand the realities and concerns of those living with lung conditions by capturing their experiences through a survey of 500 people in France, Germany, Italy, Spain, and the UK. The aim of the survey and accompanying literature review was to explore a hypothesised relationship between lung health, air quality and health inequalities, focusing on the perspectives of people with lung conditions.

About the survey:

The survey, conducted in June 2023, had 500 respondents, with even numbers from each of France, Germany, Italy, Spain, and the UK. Of those surveyed, 86% reported having asthma, 20% chronic obstructive pulmonary disorder (COPD), and 4% chronic pneumonia, with several living with more than one of these. Those surveyed were also from across the economic spectrum, with 35% classified as low-income (annual income less than €38,000); 34% medium-income (annual income above €38,000 and below €103,000); and 31% high-income (annual income above €103,000). Of respondents 47% live in cities, 33% in towns or semi-dense areas, and 20% in rural areas. Finally, those surveyed had a range of education levels, with 29% currently holding at most a high school certificate, 45% a Bachelor's degree, and 19% a post-graduate qualification.

About the event:

The roundtable discussion "*Patient Perspectives on the Impact of Climate Change on Respiratory Wellbeing*" gathers today a number of high-level health and climate experts to discuss the findings of the Economist Impact report. Just a few days ahead of the European Respiratory Society international congress, the event focuses on concrete policy recommendations for effective and holistic health care policies that consider the lived experiences of patients with lung diseases.

Panelists include: Gerard Dunleavy, *Senior Consultant at Economist Impact*; Anna Pirani, *Senior Research Associate, Centro Euro Mediterraneo sui Cambiamenti Climatici (CMCC)*; Arzu Yorgancioğlu, *President, Global Initiative for Asthma (GINA)*; Rosamund Adoo-Kissi-Debrah, *President, Ella Roberta Foundation*;

Armando Ruiz, Vice President, European Federation of Allergy and Airways Diseases Patients' Association (EFA); Alessandro Chiesi, Chair of Chiesi Group; and Carmen Dell'Anna, Head of Global Medical Affairs, Chiesi Group.