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Editorial
Respiratory Diseases

Chronic Obstructive Pulmonary Disease in Super-Aged Society: A Letter From the Near Future

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▸ See the article "Recent Prevalence of and Factors Associated with Chronic Obstructive Pulmonary Disease in a Rapidly Aging Society: Korea National Health and Nutrition Examination Survey 2015-2019" in volume 38, number 14, e108.

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COPD in Super-Aged Society by 2025

Chronic obstructive pulmonary disease (COPD) is a well-known leading cause of morbidity and mortality with increased socio-economic burden.[1] Tobacco smoking and the inhalation of toxic particles, gases and outdoor air pollution are main risk factors that lead to COPD, and host factors of accelerated lung aging can also contribute to its development. We can easily expect that the "longer" we expose ourselves to "environmental factors" mentioned above, the more likely we are to develop COPD. The life expectancy of the population in Korea has increased by approximately 21 years from 62.3 years in 1970 to 83.6 years in 2021. We will reach the super-aged society by 2025, with those aged 65 or older making up 20% or more of the total population at an unprecedentedly fast pace.[2] Furthermore, from an environmental standpoint, the level of fine dust in South Korea is about 1.5 to 2 times higher than that of other cities such as London, Tokyo, and Paris.

A Letter From the Near Future

At this point, Kim et al.[3] published the article (cross-sectional study) which highlighted prevalence and factors associated with COPD in a rapidly aging society with national data during 2015–2019. This study showed that the most important factor associated with COPD is aging rather than smoking and approximately one third of study participants who were 70 years of age or older had COPD. In addition, Leem et al.[4] reported that new cases of COPD continue to occur in the elderly population, with risk factors for COPD incidence being age ≥ 60 years (adjusted relative risk = 2.52, versus age < 60 years). From the perspective of Korea, which had already become an aged society by 2020, those manuscripts look like warning letters which have just arrived from future human beings who witnessed the medical crises.

How to Solve Environmental Issue

The issue of smoking, as highlighted by Kim et al.,[3] requires a lot of efforts for smoking cessation through social campaigns and warning labels on cigarette packs, but individual determination and effort are crucial factors. In contrast, environmental issues such as air pollution cannot be solved at the individual level. We can actively choose whether to eat food based on our preferences, but disappointingly we have no choice but to breathe the air around us. That is why we need to approach this environmental issue on a societal level. Recently, there is a growing emphasis on environmental sustainability, ethical practices, and social responsibility, and companies that do not meet these standards may face negative consequences such as reputational damage, and loss of customers and investors. Similarly, environmental problems are important issues that require active participation and leadership from physicians and medical associations, who should conduct environment-related research, set priorities, and take the lead.

Expanding the Boundaries of "Family"

The environmental crisis has already begun to cast a dark shadow, solutions can be complex, and success is not always guaranteed. Therefore, we must find alternative solutions that we can do immediately. We may find solutions from our neighbors who exist around us like the air. We may be living in an era where true love, which provides trust, support, and warm care to each other, is desperately required. Fortunately, we have a tradition of "neighborly relations" in our culture. To expand the boundaries of our family, we need to have a flexible understanding and definition of relationship with neighbors beyond traditional blood ties. Based on these concepts, intergenerational solidarity can be achieved, and young generations can indirectly experience future life by witnessing and supporting the lives of the elderly in their own communities. We can expect additional effects such as early detection and prevention of pre-COPD in the younger generation.

The Limits of Future Prediction

Korea National Health and Nutrition Examination Survey (KNHNES) data that Kim et al.[3] assessed have inherent limitations as it only includes restricted information. Just like translating poems from different languages, there is a risk of interpreting nuances differently when we predict the future yet to be experienced with limited information. However, we can anticipate that a more comprehensive analyses in future research can be achieved by merging various available datasets (COPD cohort, air pollution data, meteorological data, Web data, and so on), which can provide a deeper insight into the future.[5]

Conclusion

In conclusion, with the help of modern medicine and social infrastructure, most of us have received the gift of an additional 20 years of life. Whether this dream of extending our lives will become a blessing or a catastrophe is up to both us and our society. It is time for us to respond to the letters from the near future. We must gather all our strengths through individual preparation and collective efforts at the societal level to overcome these

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challenges. Our history tells us that our nation is especially resilient in times of crisis. The stories that emerge to overcome these challenges will serve as inspiration and a message of hope to other nations that will soon encounter an aging, aged, and super-aged society following in our footsteps.

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