



Chronic Obstructive Pulmonary Disease and Life Quality

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Introduction

Chronic obstructive pulmonary disease is a preventable and treatable lung disease. Patients with COPD need to exert more effort to breathe and therefore become more fatigued. Patients with COPD may also have chronic bronchiolitis and emphysema (1). According to the data of the World Health Organization, COPD will be the third most common cause of death in the world in 2030(2). Work-related problems, air pollution, and infections are other known risk factors(3). On the other hand, COPD puts a great burden on both the person himself and the people around him, and it is a disease that lowers their quality of life.

Quality of life can be divided into non-health-related and health-related. Health-related quality of life means a state of complete physical, mental and social well-being. The so-called Short Form 36 questionnaire is a very popular test for questioning health-related quality of life. These eight scales also contribute to the main components in different ways (4).

Materials and Methods

Although there is progressive loss of FEV1 in patients with chronic obstructive pulmonary disease (COPD), functional measures cannot determine the quality of life. In recent years, measurement of quality of life in COPD has become increasingly important. For this purpose, both general and disease-specific quality of life questionnaires are used in patients with COPD(5). The aim of our study is to reveal the decrease in quality of life in patients with COPD by applying the Short Form 36 questionnaire simultaneously to patients with COPD and healthy people and comparing the results.

The minimum number of samples was calculated as $n_1=n_2=83$ total/66 when the difference between the means for 80% power at 95% confidence level was taken as 3.6 units standard deviation 8.2, referring to the previous studies, who applied to the Bezmialem Vakıf University Chest Diseases Clinic for our study. A survey will be conducted by taking 83 COPD patients and 83 volunteers. Patients with an irreversible FEV1/FVC value below 70 in the pulmonary function test for COPD disease were included in accordance with the GOLD2022 guideline. The volunteer group will be determined by pulmonary function test without COPD disease.

Results

83 COPD patients and 102 control groups participated in our survey. We examined the standard of living of patients compared to healthy people. We observed that the patients were in a worse condition than healthy people in terms of physical functions, physical role difficulties, mental health, social functioning and general health perception ($P<0.001$). On the other hand, no significant difference was found between healthy people in terms of emotional role difficulty ($P=0.181$), pain perception ($P=0.988$) and energy ($p=0.769$).

Conclusion

COPD also affects the patients life quality. A relationship between COPD and life quality is quietly high.

References

- Lareau, S., Fahry, B., Meek, P., Wang, A. (2019). Chronic Obstructive Pulmonary Disease (COPD). *American Journal of Respiratory and Critical Care Medicine*, 199, 1-2.
- Sheikh, K., Coxson, H., Parraga, G. (2016). Unravelling The Many Faces Of COPD to Optimize Its Care and Outcomes. *Official Journal of Asian Pacific Society of Respirology*, 21, 224–236.
- Raherison, C., Girodet, P.O. (2009). Epidemiology of COPD. *Journal of European Respiratory Review*, 18: 114, 213–221.
- Lins, L., Carvalho, F.M. (2016). SF-36 Total Score As A Single Measure of Health-Related Quality of Life: Scoping review. *Journal of SAGE Open Medicine*, 4, 1–12.
- Soyyigit, Ş., Erk, M., Güler, N., Kılınç, G. (2006). Tüberküloz ve Toraks Dergisi, 54(3), 259-266.
- Fazekas Pongor, V., Fekete, M., Balazs, P., Arva, D., Penzes, M., Tarantini, S., Urban, R., Varga, J.T. (2021). [Health-Related Quality of Life of COPD Patients Aged Over 40 Years](#). *Journal of Physiology International*, 108(2), 261-273.