

## **DETERMINANTS OF HEALTH-RELATED QUALITY OF LIFE IN PATIENTS WITH INTERSTITIAL LUNG DISEASES**

Marcin Sikora<sup>1</sup>, Dariusz Jastrzębski<sup>2</sup>, Katarzyna Pilzak<sup>1</sup>, Sabina Kostorz-Nosal<sup>2</sup>, Aleksandra Żebrowska<sup>1</sup>, Dariusz Ziara<sup>2</sup>

<sup>1</sup> Department of Physiological and Medical Sciences, Academy of Physical Education, 72A Mikolowska Street, 40-065 Katowice, Poland

<sup>2</sup> Department of Lung Diseases and Tuberculosis, Faculty of Medical Sciences in Zabrze, Medical University of Silesia, 41-803 Zabrze, Poland

<sup>3</sup> Department of Physiotherapy in Internal Diseases, The Jerzy Kukuczka Academy of Physical Education, 72A Mikolowska Street, 40-065 Katowice, Poland

The benefits of physical activity (PA) are well known, but research is lacking on the mechanisms responsible for the health-related quality of life (HRQL) improvements of patients with interstitial lung diseases (ILDs).

This study aimed to investigate the predictors of HRQL among patients with ILDs.

The study enrolled 22 patients with idiopathic pulmonary fibrosis (IPF), 16 patients with sarcoidosis, and 14 patients with other ILD illness and 16 healthy individuals (CG). HRQL was assessed using the 36-item Short-Form Health Survey questionnaires. Spirometry, physical performance and PA were measured. The association between physical effort, dyspnoea and fatigue was determined using modified Medical Research Council, Borg scale and Fatigue Assessment Scale.

IPF group showed significantly lower PA compared to ILD patients and sarcoidosis ( $p=0.002$ ;  $p=0.01$ ). All patients groups showed greater fatigue and lower physical functioning compared to CG ( $p = 0.018$  and  $p = 0.001$ ). The general health, vitality, mental health showed significant lower scored in ILD patients. Greater fatigue and worse physical and mental functioning correspond to aerobic insufficiency.

This study revealed a 6 domains in the SF-36 which were significantly elevated in patients compared to CG. The key predictors for HRQL decline were lower lung function values, lower PA and physical performance.