



## The effects of 8 weeks of moderate-intensity aerobic exercise with muscle relaxation on quality of life and sleep quality in patients improved by COVID-19

### Oral Presentation

**1Manouchehr Kiani Moghadam \* ; 2Somayeh Momeni; 3Farzaneh Movaseghi**

<sup>1</sup>MSc in Physical Education and Sport Sciences, Payam Noor University, Tehran, Iran( kian.1010@yahoo.com )

<sup>2</sup>Assistant Professor, Payam Noor University, South Tehran Branch, Department of Physical Education and Sport Sciences, Tehran, Iran

<sup>3</sup>Assistant Professor, Islamic Azad University, Sepidan Branch, Department of Physical Education and Sports Sciences, Fars, Iran

### Abstract

**Introduction:** Coronavirus Disease 2019 (COVID-19), as a viral disease, has highlighted the need for exercise due to its immunological and physiological effects on health. The aim of the present study was to investigate the effect of 8 weeks of moderate-intensity aerobic exercise with muscle relaxation on quality of life and sleep quality in patients improved by Covid-19.

**Method:** The present study was a quasi-experimental pretest-posttest. This study was carried out with 30 COVID-19 patients that have recovered from COVID-19 in Isfahan (randomly 15 in the experimental group and 15 in the control group). The data were collected using a WHOQOL-BREF Quality of Life Scale-abbreviated form and Pittsburgh Sleep Quality Index before and after 8 weeks. The aerobic exercise (walking, 30 min, 50-70% maximal heart rate, perceived exertion ratings between 12 to 13) and muscle relaxation exercises (10 min) were performed 5 times a week for 8 weeks with the researcher's supervision. Data were analyzed using analysis of covariance with using spss24 software at the significance level of  $p < 0.05$ .

**Results:** Statistically significant differences were found between the experimental and control groups' mean posttest scores on the quality of life ( $F = 20.53, P < 0.001$ ) and sleep quality ( $F = 9.90, P < 0.05$ ) in patients improved by COVID-19.

**Conclusion:** Moderate-intensity aerobic exercise with muscle relaxation positively affects the quality of life and quality of sleep-in patients improved by COVID-19. It seems that this type of exercise with muscle relaxation can be used in the treatment continuation in these groups.

### Keywords

Aerobic exercises; muscle relaxation; quality of life; quality of sleep; COVID-19