

ABSTRAK

Latar belakang. Gagal Jantung kronik masih merupakan masalah global di dunia. Rehabilitasi jantung dengan latihan merupakan terapi yang direkomendasikan. Menurunnya kunjungan pasien ke rumah sakit akibat pandemi Covid-19 menjadikan rehabilitasi jantung dengan metode *home-based exercise* sebagai alternatif. Program *home-based exercise* dengan inti latihan aerobik progresif pada pasien gagal jantung kronik pasca intervensi perkutan fase II dianggap mampu meningkatkan kebugaran kardiorespirasi sehingga menurunkan kejadian kardiovaskular pasca intervensi koroner perkutan dan restenosis.

Tujuan. untuk mengetahui perbedaan pengaruh latihan aerobik progresif dan non progresif dengan *home based setting* terhadap kebugaran kardiorespirasi pada pasien gagal jantung kronik pasca intervensi koroner perkutan.

Metode. Penelitian ini merupakan *quasi experimental pre and post test design* pada 28 pasien gagal jantung kronik pasca intervensi koroner perkutan, yang dibagi menjadi 2 kelompok terdiri dari kelompok perlakuan ($n=14$) dan kelompok kontrol ($n=14$). Kelompok perlakuan diberi latihan aerobik progresif dan kelompok kontrol melakukan latihan aerobik non progresif. Latihan dilakukan selama 6 minggu dan dilakukan pengukuran VO₂max dengan uji jalan 6 menit sebelum dan setelah intervensi 6 minggu pada kedua kelompok.

Hasil. Terdapat perbedaan yang bermakna secara statistik untuk nilai VO₂max pra dan pasca intervensi dalam kelompok perlakuan ($p=0,001$) dan kelompok kontrol ($p=0,029$) serta antar kelompok perlakuan dan kelompok kontrol pasca intervensi ($p = 0,002$)

Kesimpulan. Dari penelitian ini disimpulkan bahwa latihan aerobik progresif dengan metode *home based setting* dapat meningkatkan kebugaran kardiorespirasi lebih tinggi pada pasien gagal jantung kronik pasca intervensi koroner perkutan. *Home-based exercise* dapat digunakan sebagai alternatif latihan yang aman pada pasien dengan gagal jantung kronik pasca intervensi koroner perkutan saat pandemi Covid-19.

Kata kunci: *gagal jantung kronik, intervensi koroner perkutan, home-based exercise, aerobik progresif*

ABSTRACT

Background. Chronic heart failure remains global burden. Cardiac rehabilitation with exercise is highly recommended. The decreasing number of patient's visit to the hospital due to pandemic has made cardiac rehabilitation with home-based exercise method as an alternative. Home-based exercise program which its core is progressive aerobic exercise in patients with chronic heart failure after PCI is considered able to improve cardiorespiratory fitness so as to reduce cardiovascular events and restenosis.

Object. to determine the difference in the effect of progressive and non-progressive aerobic exercise with home-based settings on cardiorespiratory fitness in patients with chronic heart failure after PCI.

Method. This study was a quasi-experimental pre and post test design in 28 patients with chronic heart failure after PCI, which were divided into 2 groups consisting of the treatment group (n=14) and the control group (n=14). The treatment group was given progressive and the control group performed non-progressive aerobic exercise. The exercise was carried out for 6 weeks and VO₂max measurements were taken with a 6-minute walk test before and after the 6-week intervention in both groups.

Results. There was a statistically significant difference of VO₂max between the pre- and post-intervention in the treatment group (p=0.001) and control group (p=0.029) as well as compared between the treatment group and the control group (p = 0.002)

Conclusion. From this study can be concluded that progressive aerobic exercise with home based setting method can improve cardiorespiratory fitness higher in patients with chronic heart failure after PCI. Home-based exercise can be used as a safe alternative to exercise in patients with chronic heart failure after PCI during the Covid-19 pandemic.

Key word: *Chronic heart failure, Percutaneous coronary intervention, home-based exercise, progressive aerobic*