

ABSTRAK

Senam aerobik menjadi salah satu olahraga yang banyak digemari oleh masyarakat dari beragam usia, umumnya pada ibu rumah tangga. Kadar LED (Laju Endap Darah) adalah penanda peradangan yang digunakan dalam praktik klinis rutin, LED merupakan penduga inflamasi secara keseluruhan karena bergantung pada konsentrasi protein fase akut yang bersirkulasi dalam darah, terutama fibrinogen. CRP (*C-reactive protein*) merupakan penanda inflamasi sebagai respon terhadap berbagai rangsangan inflamasi baik inflamasi akut maupun kronis. Protein ini merupakan protein reaktan fase akut yang disintesis terutama oleh hati. Kadar CRP dan kadar LED sama-sama dikaitkan sebagai efek dari adanya latihan fisik secara teratur karena kemungkinannya sebagai efek anti inflamasi. Penelitian ini bertujuan mengetahui komparasi kadar CRP dan kadar LED sebelum dan sesudah senam pada komunitas aerobik di Kecamatan Taman Kabupaten Sidoarjo. Jenis penelitian adalah penelitian *eksperimental* dengan pendekatan kualitatif deskriptif. Populasi penelitian adalah anggota komunitas senam aerobik di Kecamatan Taman, Kabupaten Sidoarjo. Sampel penelitian sebanyak 30 orang dengan teknik *purposive sampling* pada bulan Januari-April 2022, pemeriksaan dilakukan di Laboratorium Imunoserologi Kampus Jurusan Teknologi Laboratorium Medis Poltekkes Kemenkes Surabaya. Berdasarkan hasil uji statistik dependensi kadar CRP dan uji statistik T-Test LED tidak terdapat komparasi antara kadar CRP dan kadar LED ($P > 0,05$) sebelum dan sesudah senam pada komunitas senam aerobik di Kecamatan Taman Kabupaten Sidoarjo.

Kata kunci : Senam aerobik, Kadar CRP, Kadar LED

ABSTRACT

Aerobic exercise has become one of the most popular sports among people of all ages, generally housewives. Blood depletion rate (BDR) is a marker of inflammation used in routine clinical practice. LED is an overall predictor of inflammation because it depends on the concentration of acute phase proteins circulating in the blood, especially fibrinogen. CRP (C-reactive protein) is a marker of inflammation in response to various inflammatory stimuli, both acute and chronic inflammation. This protein is an acute-phase reactant protein that is synthesized mainly by the liver. Because of the possibility of an anti-inflammatory effect, CRP levels and LED levels were both associated as an effect of regular physical exercise. This study aims to determine the comparison of CRP levels and LED levels before and after exercise in the aerobic community in Taman District, Sidoarjo Regency. This type of research is experimental research with a descriptive qualitative approach. The study population is a member of the aerobic exercise community in Taman District, Sidoarjo Regency. In January-April 2022, a research sample of 30 people was collected using a purposive sampling technique and examined at the Immunoserology Laboratory of the Campus of the Department of Technology Medical Laboratory Poltekkes Ministry of Health Surabaya. Based on the results of the CRP level dependence statistical test and LED T-Test statistical test, there is no comparison between CRP level and LED level ($P > 0.05$) before and after exercise in the aerobic exercise community in Taman District, Sidoarjo Regency.

Keywords : Aerobic exercise, CRP level, LED level