

**KORELASI INDEKS MASSA TUBUH DENGAN PERUBAHAN KADAR
LAKTAT DARAH MAHASISWA KEDOKTERAN
UNIVERSITAS JENDERAL SOEDIRMAN
Studi Pada *Repeated Sprint Sessional 3***

Hana Khairunnisa, Susiana Candrawati, Wahyu Siswandari
Fakultas Kedokteran Universitas Jenderal Soedirman, Purwokerto, Indonesia

ABSTRAK

Kebugaran jasmani sangat penting bagi mahasiswa kedokteran. Salah satu faktor yang mempengaruhi kebugaran jasmani adalah indeks massa tubuh (IMT). Peningkatan IMT diduga berkorelasi dengan peningkatan kadar laktat darah yang merupakan salah satu penentu kebugaran jasmani. Tujuan penelitian adalah mengetahui korelasi IMT dengan perubahan kadar laktat darah mahasiswa kedokteran Universitas Jenderal Soedirman. Penelitian ini merupakan studi eksperimental dengan pendekatan *quasy experimental before and after*. Sebanyak 32 subjek penelitian diukur IMT dan kadar laktat darahnya sebelum dan setelah intervensi *repeated sprint sessional 3* (RSS3). Hasil pengukuran dianalisis menggunakan uji t-berpasangan dan uji korelasi *pearson* dengan tingkat kemaknaan $p < 0,05$. Uji t-berpasangan menunjukkan tidak terdapat perbedaan bermakna kadar laktat darah sebelum dan setelah RSS3 ($p = 0,74$). Uji korelasi *pearson* menunjukkan tidak terdapat korelasi bermakna IMT dengan perubahan kadar laktat darah ($p = 0,44$), arah korelasi positif, dan kekuatan korelasi sangat lemah ($r = 0,03$), sehingga disimpulkan bahwa tidak terdapat korelasi antara IMT dengan perubahan kadar laktat darah mahasiswa kedokteran Universitas Jenderal Soedirman.

Kata Kunci: Kebugaran jasmani, indeks massa tubuh, laktat darah, *repeated sprint sessional 3*.

**THE CORRELATION BETWEEN BODY MASS INDEX WITH THE CHANGES
OF BLOOD LACTATE LEVELS IN UNIVERSITY OF JENDERAL
SOEDIRMAN'S MEDICAL STUDENTS
A Study at Repeated Sprint Sessional 3**

Hana Khairunnisa, Susiana Candrawati, Wahyu Siswandari
Medical Faculty of University of Jenderal Soedirman, Purwokerto, Indonesia

ABSTRACT

Physical fitness is very important for medical students. One of the factor that influence physical fitness is body mass index (BMI). It's expected that there's a correlation between the increment of BMI and the increment of blood lactate levels which is one of the factor that determine physical fitness. The aim of this study was to understand the correlation between BMI with the changes in blood lactate levels in University of Jenderal Soedirman's medical students. This research used the quasi-experimental with before and after design. A total of 32 subjects were measured their BMIs and the blood lactate levels were measured before and after the intervention of repeated sprint sessional 3 (RSS3). Results were analyzed using paired t-test and pearson correlation test which showed significance level at $p < 0.05$. Paired t-test showed no significant difference between blood lactate levels before and after RSS3 ($p = 0.74$). Pearson correlation test showed no significant correlation between BMI with the changes in blood lactate levels ($p = 0.44$) with very weak positive correlation ($r = 0.03$), so it's concluded that there is no correlation between BMI with the changes in blood lactate levels in University of Jenderal Soedirman's medical students.

Keywords: Physical fitness, body mass index, blood lactate, repeated sprint sessional 3.