

## **ABSTRACT**

### **THE DIFFERENCE OF PULMONARY FUNCTIONAL CAPACITY OF STUDENTS FACULTY OF MEDICINE LAMPUNG UNIVERSITY WHO DO AEROBIC EXERCISE JUMP ROPE AND JOGGING**

By

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**Background:** Students have busy activities so often forget to do exercises that cause declining body health. Jump rope and jogging exercises which are types of aerobic exercise are practical exercises that can improve the functional performance of the body especially the functional capacity of the pulmonary.

**Objective:** The purpose of this study is to determine differences in the functional capacity of the pulmonary of students who did jogging and jump rope.

**Methods:** RCT research with 35 students of the Faculty of Medicine, University of Lampung which was divided into a control group and an intervention group. The intervention group had a jogging exercise dose: frequency 2 times a week, intensity 40% -90% HRR, time 30 minutes, aerobic type and jump rope exercise dose: frequency 4 times a week, intensity 70% -75% MHR, time 5 minutes, type aerobics.

**Results :** The mean VO<sub>2</sub> Max value of the exercise group was higher than the control group and had significant differences. The mean VO<sub>2</sub> Max jump rope group was higher than the jogging group but there was no significant difference between them.

**Conclusion:** There was no significant difference between the jump rope and jogging exercise groups but there were significant differences between the exercise training groups and the control group so that jump rope and jogging exercises were considered to increase VO<sub>2</sub> Max.

**Keywords:** Aerobics, Exercise, Jogging, Jump Rope, Pulmonary Functional Capacity.

## ABSTRAK

### PERBEDAAN KAPASITAS FUNGSIONAL PARU MAHASISWA FAKULTAS KEDOKTERAN UNIVERISTAS LAMPUNG YANG MELAKUKAN LATIHAN AEROBIK JUMP ROPE DAN JOGGING

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**Latar Belakang:** Mahasiswa memiliki aktivitas yang sibuk sehingga sering lupa untuk melakukan latihan yang menyebabkan kesehatan tubuh menurun. Latihan *jump rope* dan *jogging* yang merupakan jenis olahraga aerobik merupakan latihan praktis yang dapat meningkatkan kinerja fungsional tubuh khususnya kapasitas fungsional paru.

**Tujuan:** Tujuan penelitian ini untuk mengetahui perbedaan kapasitas fungsional paru mahasiswa yang melakukan latihan *jogging* dan *jump rope*.

**Metode:** Penelitian RCT dengan 35 subjek mahasiswa Fakultas Kedokteran Universitas Lampung yang terbagi menjadi kelompok kontrol dan kelompok intervensi. Kelompok intervensi memiliki dosis latihan *jogging*: frekuensi 2 kali seminggu, intensitas 40%-90% HRR, waktu 30 menit, tipe aerobik dan dosis latihan *jump rope*: frekuensi 4 kali seminggu, intensitas 70%-75% MHR, waktu 5 menit, tipe aerobik.

**Hasil :** Nilai rerata VO<sub>2</sub> Max kelompok latihan lebih tinggi dari kelompok kontrol dan memiliki perbedaan bermakna. Nilai rerata VO<sub>2</sub> Max kelompok *jump rope* lebih tinggi dari kelompok *jogging* tetapi tidak terdapat perbedaan bermakna antara keduanya.

**Simpulan:** Tidak terdapat perbedaan bermakna antara kelompok latihan *jump rope* dan *jogging* tetapi terdapat perbedaan bermakna antara kelompok latihan olahraga dengan kelompok kontrol sehingga latihan *jump rope* dan *jogging* dinilai dapat meningkatkan VO<sub>2</sub> Max.

**Kata kunci :**Aerobik, *Jogging*, *Jump Rope*, Kapasitas Fungsional Paru, Latihan,,