

**PENGARUH PROGRAM INTERVENSI *MODERATE INTENSITY
CONTINOUS TRAINING (MICT)* TERHADAP KADAR *INTERLEUKIN-6*
PADA WANITA OBESITAS**

ABSTRAK

Pendahuluan: Obesitas dapat menyebabkan pengeluaran sitokin pro-inflamasi yaitu interleukin-6 (IL-6). IL-6 dapat menjadi faktor penyebab komplikasi dari obesitas berupa resistensi insulin. Latihan fisik dinilai untuk menangani obesitas dan dapat menurunkan kadar *Interleukin-6* (IL-6). Model latihan fisik yang bisa digunakan adalah *Moderate Intensity Continuous Training (MICT)*. **Tujuan:** mengetahui pengaruh program intervensi MICT terhadap kadar IL-6 pada wanita obesitas. **Metode:** Penelitian ini menggunakan merupakan jenis penelitian *observasional cross sectional* analisis data sekunder. Subjek sebanyak 14 wanita obesitas. Setiap subyek melakukan intervensi MICT selama 12 minggu dengan frekuensi 3 kali setiap minggu. Pemeriksaan IL-6 diukur sebelum dan setelah intervensi menggunakan kit Elisa dengan metode *Sandwich*. Data dianalisis secara univariat dan bivariat. **Hasil:** Hasil menunjukkan kadar IL-6 sebelum intervensi sebesar $4,02 \pm 0,64$ pg/ml. Kadar IL-6 post-intervensi sebesar $2,63 \pm 0,75$ pg/ml. Hasil uji t-berpasangan menunjukkan adanya perbedaan yang signifikan ($p=0,000$). **Kesimpulan:** MICT berpengaruh terhadap kadar IL-6 wanita obesitas, yaitu MICT dapat menurunkan kadar IL-6 pada wanita obesitas.

Kata kunci: Obesitas, *Moderate Intensity Continuous Training (MICT)*, Interleukin-6, IL-6.



THE EFFECT OF MODERATE INTENSITY CONTINUOUS TRAINING (MICT) INTERVENTION PROGRAM ON INTERLEUKIN-6 LEVELS IN OBESITY WOMEN

ABSTRACT

Introduction: Obesity causes the release of pro-inflammatory cytokines was interleukin-6 (IL-6). IL-6 can be a factor causing complications of obesity was insulin resistance. Physical exercise is considered to be used to treat obesity and can reduce levels of Interleukin-6 (IL-6). The physical exercise model that can be used is Moderate Intensity Continuous Training (MICT). **Objective:** to determine the effect of the MICT intervention program on IL-6 levels in obese women. **Methods:** This study used an observational cross-sectional type of secondary data analysis. Subjects were 14 obese women. Each subject intervened MICT for 12 weeks with a frequency of 3 times every week. IL-6 assays were measured before and after the intervention using the Elisa kit with the Sandwich method. Data were analyzed by univariate and bivariate. **Results:** The results showed that IL-6 levels before intervention were 4.02 ± 0.64 pg/ml. Post-intervention IL-6 levels were 2.63 ± 0.75 pg/ml. Paired t-test results showed a significant difference ($p=0.000$). **Conclusion:** MICT affect IL-6 levels of obese women, MICT can reduced IL-6 levels of obese women.

Keywords: Obesity, *Moderate Intensity Continuous Training*, *Interleukin-6*, IL-6

