

PERBEDAAN KADAR *NON HIGH DENSITY LIPOPROTEIN CHOLESTEROL* PADA MAHASISWA PENYANDANG OBES DAN NON OBES



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ABSTRACT

THE DIFFERENCE OF NON HIGH DENSITY LIPOPROTEIN CHOLESTEROL LEVELS IN OBESE AND NON OBESE STUDENT

By

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Non High Density Lipoprotein Cholesterol was calculated as total cholesterol levels minus HDL levels. Non HDL-C levels can be used as a predictor of cardiovascular disease risk. Non HDL-C levels tend to increase in obese people. This research aims to determine the differences of non HDL-C levels in obese and non obese students.

This research was an observational analytic study with a cross sectional design. This research was conducted at the Central Laboratory of Dr. M. Djamil Hospital Padang from July 2020 to February 2021. The sample was 60 students at Faculty of Medicine, Andalas University, consists of 30 obese students and 30 non obese students. Statistical analysis used the *independent T-test*. The significant test results if the *p value* <0.05.

The results showed that the mean age of the subjects was 20.32 ± 1.05 years. The mean BMI in obese student was $32.53 \pm 4.13 \text{ kg/m}^2$ and the mean BMI in non obese student was $21.11 \pm 1.85 \text{ kg/m}^2$. The mean non HDL-C level in the obese student was $131.43 \pm 34.70 \text{ mg/dL}$ and the mean non HDL-C level in non obese student was $123.93 \pm 35.55 \text{ mg/dL}$. Bivariate analysis found that there was no significant difference between the mean non-HDL C levels in the obese student and non obese student ($p = 0.412$).

The conclusion in this research is the mean non HDL-C levels in the obese and non obese student is not different.

Keywords: Body mass index, *Non High Density Lipoprotein Cholesterol, Obesity*

ABSTRAK

PERBEDAAN KADAR NON HIGH DENSITY LIPOPROTEIN CHOLESTEROL PADA MAHASISWA PENYANDANG OBES DAN NON OBES

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Non High Density Lipoprotein Cholesterol dihitung sebagai kadar kolesterol total dikurangi kadar HDL. Kadar non HDL-C dapat digunakan sebagai prediktor risiko penyakit kardiovaskular. Kadar non HDL-C cenderung meningkat pada penyandang obes. Penelitian ini bertujuan untuk mengetahui perbedaan kadar non HDL-C pada mahasiswa penyandang obes dan non obes.

Penelitian ini merupakan penelitian analitik observasional dengan rancangan potong lintang. Penelitian ini dilakukan di Laboratorium Sentral RSUP Dr. M. Djamil Padang pada bulan Juli 2020 hingga Februari 2021. Sampel penelitian ini adalah 60 mahasiswa S1 kedokteran Fakultas Kedokteran Universitas Andalas, terdiri dari 30 mahasiswa penyandang obes dan 30 mahasiswa non obes. Analisis statistik menggunakan uji *T-test independen*. Hasil uji bermakna jika *p value* < 0,05.

Hasil penelitian didapatkan rerata umur subjek $20,32 \pm 1,05$ tahun. Rerata IMT pada mahasiswa penyandang obes adalah $32,53 \pm 4,13$ kg/m² dan rerata IMT pada mahasiswa non obes adalah $21,11 \pm 1,85$ kg/m². Rerata kadar non HDL-C pada mahasiswa penyandang obes adalah $131,43 \pm 34,70$ mg/dL dan rerata kadar non HDL-C pada mahasiswa non obes adalah $123,93 \pm 35,55$ mg/dL. Analisis bivariat didapatkan tidak ada perbedaan yang bermakna antara rerata kadar non HDL-C pada mahasiswa penyandang obes dan non obes (*p* = 0,412).

Kesimpulan pada penelitian ini adalah rerata kadar non HDL-C pada mahasiswa penyandang obes dan non obes tidak berbeda.

Kata kunci: Indeks massa tubuh, *Non High Density Lipoprotein Cholesterol*, Obesitas