

# PERBEDAAN KADAR KOLESTEROL PADA SERUM PASIEN HIPERTENSI YANG DIPERIKSA SEGERA, SETELAH DISIMPAN SELAMA 4 JAM DAN 8 JAM PADA SUHU 2-8 °C

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## ABSTRAK

**Latar belakang:** Tahap praanalitik adalah tahapan untuk menjamin bahwa spesimen yang diterima benar dan dari pasien yang benar serta memenuhi syarat yang telah ditentukan. Kesalahan praanalitik memberikan kontribusi 60-70% dari total kesalahan. Kenaikan kadar kolesterol dapat meningkatkan risiko kasus darah tinggi pada populasi umur produktif.

**Tujuan:** Mengetahui perbedaan kadar kolesterol pasien hipertensi yang disimpan selama 4 jam dan 8 jam pada suhu 2-8°C.

**Metode Penelitian:** Penelitian ini merupakan penelitian pra-eksperimen dengan desain penelitian *One Group Pretest Posttest Design*.

**Hasil:** Rerata kadar kolesterol pasien hipertensi yang diperiksa segera, setelah disimpan selama 4 jam dan 8 jam pada suhu 2-8°C berturut-turut yaitu 196,15 mg/dl; 196,18 mg/dl dan 196,68 mg/dl. Selisih rerata kadar kolesterol serum yang diperiksa segera dan disimpan 4 jam adalah 0,025 mg/dl (0,013%), sedangkan selisih rerata kadar kolesterol yang diperiksa segera dan disimpan 8 jam adalah 0,525 mg/dl (0,268 %). Hasil uji *Repeated Measures ANOVA* menunjukkan nilai  $p (0.400) > 0,05$ , yang berarti bahwa tidak ada perbedaan kadar kolesterol yang disimpan selama 4 jam dan 8 jam pada suhu 2-8°C.

**Kesimpulan:** Kadar kolesterol pada serum pasien hipertensi yang diperiksa segera, disimpan selama 4 jam dan 8 jam, belum memberikan perbedaan yang signifikan secara klinis.

**Kata Kunci:** Serum Pasien Hipertensi, Kolesterol, Penundaan.

# **THE DIFFERENCE IN CHOLESTEROL LEVELS IN THE SERUM OF HYPERTENSIVE PATIENTS THAT IS EXAMINED IMMEDIATELY, STORED FOR 4 HOURS, AND STORED FOR 8 HOURS AT A TEMPERATURE OF 2-8 °C**

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## **ABSTRACT**

**Background:** The preanalytical phase is a critical step aimed at ensuring that the received specimen is correct, derived from the correct patient, and meets the predetermined criteria. Preanalytical errors contribute to 60-70% of the total errors. An elevation in cholesterol levels may increase the risk of hypertension cases in the productive age population.

**Objective:** To determine the difference in cholesterol levels among hypertensive patients stored for 4 hours and 8 hours at a temperature of 2-8°C.

**Research Methods:** This study is a pre-experimental research with a One Group Pretest Posttest Design research design.

**Result:** The average cholesterol levels of hypertensive patients who were examined immediately, after being stored for 4 hours and 8 hours at temperatures of 2-8°C, were 196.15 mg/dl, 196.18 mg/dl, and 196.68 mg/dl, respectively. The mean difference in serum cholesterol levels between those checked immediately and those stored for 4 hours was 0.025 mg/dl (0.013%), while the mean difference in cholesterol levels between those checked immediately and those stored for 8 hours was 0.525 mg/dl (0.268%). The results of the Repeated Measures ANOVA test show a p-value of 0.400, which is > 0.05, indicating that there is no significant difference in cholesterol levels stored for 4 hours and 8 hours at a temperature of 2-8°C.

**Conclusion:** The cholesterol levels in the serum of hypertensive patients, when examined immediately, and stored for 4 hours and 8 hours, have not shown significant clinical differences.

**Key word:** Serum of Hypertension Patients, Cholesterol, Delay.