

ABSTRAK

Kolesterol dan trigliserida dikenal sebagai jenis lemak dalam tubuh yang memiliki sifat non polar sehingga sulit larut dalam darah. Pada Rumah Sakit sering terjadi penundaan pemeriksaan sampel darah. Hal ini menyebabkan diberlakukan penyimpanan untuk menjaga sampel darah tetap stabil. Selain kolesterol dan trigliserida, dalam darah terdapat juga air, enzim, dan garam-garam mineral. Enzim dalam darah dapat menyebabkan reaksi hidrolisis selama penyimpanan. Tujuan penelitian ini untuk melihat pengaruh penyimpanan sampel darah terhadap kadar kolesterol total dan trigliserida pada subjek uji mahasiswa sehat.

Jenis penelitian ini adalah eksperimental murni dengan desain penelitian *posttest-only control design*. Subjek uji ditentukan secara non-random. Jumlah subjek uji yaitu 25 mahasiswa Sanata Dharma yang memenuhi kriteria inklusi. Subjek uji dibagi menjadi 2 kelompok yaitu kontrol dan perlakuan untuk masing-masing kolesterol dan trigliserida. Penyimpanan yang digunakan yaitu suhu lemari es 4°C selama 1 minggu. Pengukuran kadar kolesterol dan trigliserida menggunakan alat Lipid Pro Meter dan analisis data menggunakan *paired sample t-test*.

Berdasarkan uji t berpasangan didapatkan kolesterol total dengan *p value* <0,05 artinya tidak ada pengaruh penyimpanan pada kolesterol. Sedangkan trigliserida dengan nilai *p value* >0,05 artinya ada pengaruh penyimpanan sampel darah terhadap kolesterol dan trigliserida.

Kata kunci: *Darah, kolesterol, trigliserida, penyimpanan, enzim*

ABSTRACT

Cholesterol and triglycerides are known as types of fat in the body which have non-polar properties making it difficult to dissolve in the blood. At the hospital there is often a delay in examining blood samples. This causes storage to be carried out to keep the blood sample stable. In addition to cholesterol and triglycerides, blood also contains water, enzymes and mineral salts. Enzymes in the blood can cause hydrolysis reactions during storage. The purpose of this study was to see the effect of storing blood samples on total cholesterol and triglyceride levels in healthy student test subjects.

This type of research is a pure experimental research design with a posttest-only control design. The test subjects were determined non-randomly. The number of test subjects was 25 Sanata Dharma students who were included in the inclusion criteria. The test subjects were divided into 2 groups, namely control and treatment for each cholesterol and triglyceride. Storage used is refrigerator temperature 4°C for 1 week. Cholesterol and triglyceride levels were measured using a Lipid Pro Meter and data analysis using paired sample t-test.

Based on the paired t test, it was found that total cholesterol had a p value <0.05, meaning that there was no effect of storage on cholesterol. While triglycerides had a p value > 0.05 means that there is an effect of storing blood samples on cholesterol and triglycerides.

Keywords: *Blood, cholesterol, triglycerides, storage, enzymes*