

## ABSTRAK

**Latar Belakang :** Tahap praanalitik merupakan tahap yang menentukan kualitas sampel untuk pemeriksaan laboratorium. Umumnya pemeriksaan kimia darah menggunakan serum sebagai sampel pemeriksaan. Permasalahan yang sering terjadi yaitu pengolahan sampel yang tertunda karena berbagai alasan tertentu. Penundaan pengolahan sampel dapat mempengaruhi hasil pemeriksaan sehingga tidak sesuai dengan keadaan sesungguhnya.

**Tujuan Penelitian :** Penelitian ini bertujuan untuk mengetahui perbedaan kadar glukosa darah pada sampel darah yang didiamkan 30 menit dan 120 menit sebelum disentrifus.

**Metode Penelitian :** Penelitian ini merupakan penelitian observasional analitik dengan desain penelitian *cross sectional*. Sampel yang digunakan berupa serum yang terdiri dari 2 kelompok yang berasal dari 15 responden. Pengolahan darah dilakukan dengan menggunakan 2 buah tabung vakutainer tutup merah. Darah pada tabung vakutainer pertama didiamkan 30 menit sebelum disentrifus dan darah pada tabung vakutainer kedua didiamkan 120 menit sebelum disentrifus. Hasil pemeriksaan kadar glukosa darah dianalisis secara deskriptif berupa tabel dan diagram batang serta secara statistik menggunakan SPSS 21.0 *for Windows*.

**Hasil Penelitian :** Hasil penelitian ini menunjukkan terdapat penurunan kadar glukosa darah pada darah yang didiamkan 120 menit sebelum disentrifus. Rata-rata kadar glukosa darah pada sampel darah yang didiamkan 30 menit sebelum disentrifus sebesar 95,51 mg/dL dan rata-rata kadar glukosa darah pada sampel darah yang didiamkan 120 menit sebelum disentrifus sebesar 79,66 mg/dL.

**Kesimpulan :** Kesimpulan pada penelitian ini adalah ada perbedaan kadar glukosa darah pada sampel darah yang didiamkan 30 menit dan 120 menit sebelum disentrifus dengan rata-rata selisih sebesar 18,87%.

**Kata kunci :** glukosa darah, pendiaman darah, serum

## ABSTRACT

**Background :** The pre-analytic stage is the stage that determines the quality of the sample for laboratory examination. Generally, blood chemistry tests use serum as a sample for testing. The problem that often occurs is that the processing of samples is delayed for various reasons. Delay in sample processing can affect the results of the examination so that it is not in accordance with the actual situation.

**Research Objective :** This study aims to determine the differences of blood glucose levels in blood sample that was settled for 30 minutes and 120 minutes before being centrifuged.

**Research Method :** This study was an analytic observational study with a cross sectional study design. The sample used was serum consisting of 2 groups from 15 respondents. Blood processing was carried out using 2 red vacuutainer tubes. The blood in the first vacuutainer tube was settled for 30 minutes before being centrifuged and the blood in the second vacuutainer tube was settled 120 minutes before being centrifuged. The results of the examination of blood glucose levels were analyzed descriptively in the form of tables and bar charts and statistically using SPSS 21.0 *for Windows*.

**Results :** The results of this study indicate that there was a decrease in blood glucose levels in the blood that was left for 120 minutes before being centrifuged. The average blood glucose level in the blood sample that was allowed to stand for 30 minutes before being centrifuged was 95.51 mg/dL and the average blood glucose level in the blood sample that was allowed to stand 120 minutes before being centrifuged was 79.66 mg/dL.

**Conclusion :** The conclusion in this study is that there are differences in blood glucose levels in blood samples that are left to stand for 30 minutes and 120 minutes before being centrifuged with an average difference of 18.87%.

**Keywords :** blood glucose, settling blood, serum