

**PENGARUH PENYIMPANAN DARAH TERHADAP KADAR  
HEMOGLOBIN PADA *WHOLE BLOOD* SEBELUM DAN  
SESUDAH DISIMPAN SELAMA SATU MINGGU**

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**INTISARI**

**Latar Belakang** : Penyediaan darah yang aman sangat diperlukan guna menunjang pengobatan penderita lewat transfusi darah sehingga didapatkan manfaat yang optimal. Diperlukan prosedur penyimpanan yang baik dari darah di dapatkan sampai darah di berikan kepada pasien.

**Tujuan Penelitian** : Mengetahui pengaruh penyimpanan darah terhadap kadar hemoglobin pada *whole blood* sebelum dan sesudah disimpan selama satu minggu di PMI Kabupaten Sleman.

**Metode Penelitian** : Jenis penelitian yang digunakan adalah penelitian eksperimen dengan *desaign* pre dan post eksperimen. Sampel untuk penelitian ini 4 kantong darah.

**Hasil Penelitian** : pengaruh penyimpanan darah terhadap kadar hemoglobin pada *whole blood* sebelum dan sesudah disimpan selama satu minggu di PMI Kabupaten Sleman diperoleh Kadar HB rata-rata sebelum penyimpanan adalah 15.62 mg/dl dan sesudah penyimpanan seminggu adalah 19.22 mg/dl. Hasil berikutnya terdapat perbedaan kadar hemoglobin sebelum dan sesudah penyimpanan selama seminggu, dengan p value 0,049.

**Kesimpulan** : Terdapat perbedaan kadar hemoglobin sebelum dan sesudah penyimpanan selama seminggu di PMI Kabupaten Sleman dengan p value 0,049.

Kata kunci : Penyimpanan darah, kadar hemoglobin dan *whole blood*

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# THE EFFECT OF BLOOD STORAGE ON HEMOGLOBIN LEVELS IN WHOLE BLOOD BEFORE AND AFTER STORED FOR ONE WEEK

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## ABSTRACT

**Background** : Safe blood supply is needed to support the treatment of patients through blood transfusions so that optimal benefits can be obtained. This is very necessary because blood is a biological material that can be affected by time and the environment. Procedures for proper storage of blood are required until blood is given to the patient.

**Objective** : To determine the effect of blood storage on hemoglobin levels in whole blood before and after storage for one week at PMI Sleman Regency.

**Research Methods** : The type of research used is experimental research with pre- and post-experimental design. The sample for this study was determined based on Permenkes 91 of 2015 for Quality Control of at least 4 blood bags.

**Results** : The effect of blood storage on hemoglobin levels in whole blood before and after being stored for one week at PMI Sleman Regency showed that the average HB level before storage was 15.62 mg / dl and after a week of storage was 19.22 mg / dl. The next result is that there is a difference in hemoglobin levels before and after storage for a week, with a p value of 0.049. Then there was an increase in the average HB level, where the HB level before week of storage was 15.62 mg / dl while the HB level after week of storage was 19.22.

**Conclusion** : There are differences in hemoglobin levels before and after storage for a week in PMI Sleman Regency with p value 0.049.

**Key words** : Blood storage, hemoglobin levels and whole blood

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