

# GAMBARAN HASIL *CROSSMATCHING* TERHADAP KENAIKAN KADAR HEMOGLOBIN PASIEN ANEMIA DI BDRS SIAGA MEDIKA PURBALINGGA TAHUN 2024

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## INTISARI

**Latar Belakang :** Anemia adalah kelainan jumlah eritrosit tubuh tidak memenuhi kebutuhannya. Kadar hemoglobin normal pada wanita dewasa 12,0 g/dl dan pria dewasa sebesar 13,0 g/dl. Transfusi darah dilakukan untuk meningkatkan kadar hemoglobin. Sebelum transfusi dilakukan, diperlukan tes *crossmatching*. Hasil pengamatan terjadi penurunan kadar haemoglobin setelah transfusi *Packed Red Cell*.

**Tujuan Penelitian :** Untuk mengetahui gambaran hasil *crossmatching* terhadap kenaikan kadar hemoglobin pasien anemia di BDRS Siaga Medika Purbalingga tahun 2024.

**Metode Penelitian :** Penelitian ini dilakukan di RSU Siaga Medika Purbalingga. Data yang diperoleh dari SIMRS yang terdapat di BDRS tahun 2024 dan lembar observasi yang kemudian diolah menggunakan aplikasi *microsoft excel*. Metodologi penelitian menggunakan penelitian deskriptif kuantitatif. Teknik sampel yang digunakan adalah *Purposive Sampling* dengan kriteria inklusinya pasien anemia yang menerima transfusi 2 kantong darah. Jumlah sampel penelitian ini 62 sampel dengan hasil *crossmatch* 42 sampel pasien kompatibel dan 20 sampel pasien inkompatibel.

**Hasil :** Sebanyak 62 sampel pasien anemia yang menerima transfusi darah *Packed Red Cell* di BDRS Siaga Medika Purbalingga periode triwulan Januari 2024 - Maret 2024. Sebagian besar penderita anemia berjenis kelamin Perempuan (55%). Sebagian besar memiliki golongan darah O 29 (47%). Berdasarkan hasil *crossmatchnya* sebagian besar penderita anemia yang membutuhkan transfusi darah dengan hasil *crossmatch* kompatibel (68%) dan hasil inkompatibel (32%). Rata-rata kenaikan kadar hemoglobin pasien anemia dengan hasil *crossmatch* inkompatibel (2,3 gr/dL) dan kompatibel (1,9 gr/dL).

**Kesimpulan :** Kadar hemoglobin setelah transfusi pada hasil kompatibel memiliki rata-rata kenaikan sebanyak 1,9gr/dl , sedangkan pada hasil inkompatibel rata-rata kenaikannya 2,3gr/dl.

**Kata Kunci:** Anemia, Hemoglobin, *Crossmatching*

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## *ABSTRACT*

**Background :** Anemia is a condition in which the number of erythrocytes in the body is insufficient to meet its needs. The normal hemoglobin level for adult women is 12.0 g/dl, and for adult men, it's 13.0 g/dl. Blood transfusions are performed to increase hemoglobin levels. Before a transfusion is carried out, a *crossmatching* test is required.

**Objetive :** To examine the impact of crossmatching results on the increase in hemoglobin levels in anemia patients at Siaga Medika Hospital, Purbalingga, in 2024.

**Method :** This research was conducted at RSU Siaga Medika Purbalingga. Data were obtained from SIMRS at Siaga Medika Hospital in 2024 and observation sheets, which were then processed using Microsoft Excel. The research methodology employed a descriptive quantitative approach. The sampling technique used was purposive sampling, with inclusion criteria being anemia patients who received a transfusion of 2 units of blood. The sample size for this research was 62, consisting of 42 patients with compatible crossmatch results and 20 patients with incompatible crossmatch results.

**Result :** A total of 62 anemia patients who received *Packed Red Cell* transfusions at RSU Siaga Medika , during the first quarter of January 2024 to March 2024 were included in the research. The majority of anemia patients were female (55%), while males accounted for 45%. The majority of patients had blood type O, comprising 29 patients (47%). Based on the crossmatching results, most anemia patients requiring blood transfusions had compatible crossmatch results (68%), while 32% had incompatible results. The average increase in hemoglobin levels for anemia patients with incompatible *crossmatch* results was 2.3 g/dL, compared to 1.9 g/dL for those with compatible results.

**Conclusion :** The average increase in hemoglobin levels after transfusion was 1.9 g/dL for patients with compatible crossmatch results, while it was 2.3 g/dL for those with incompatible crossmatch results.

**Keywords:** Anemia, Hemoglobin, *Crossmatching*

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