

# **PRODUKSI DARAH DAN KARAKTERISTIK PENDONOR DARAH BERDASARKAN GOLONGAN DARAH ABO DAN RHESUS DI UTD PMI KOTA YOGYAKARTA TAHUN 2019**

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## **INTISARI**

**Latar Belakang:** Golongan darah merupakan ciri khusus darah pada individu dikarenakan perbedaan perbedaan jenis karbohidrat dan protein di permukaan membran sel darah merah. Kecocokan golongan darah sangat krusial apabila digunakan dalam keperluan transfusi darah. Pengelompokan golongan darah secara tepat dapat meminimalisir terjadinya risiko reaksi transfusi pada resipien.

**Tujuan Penelitian:** Mengidentifikasi produksi darah dan karakteristik pendonor darah berdasarkan golongan darah ABO dan rhesus meliputi jenis kelamin, usia, dan jenis pendonor di UTD PMI Kota Yogyakarta tahun 2019.

**Metode Penelitian:** Desain penelitian ini adalah deskriptif dengan pendekatan waktu retrospektif.

**Hasil Penelitian:** Mayoritas produksi golongan darah O Rh<sup>+</sup> 17.165 (37,23%) dan O Rh<sup>-</sup> 47 (0,10%), sedangkan paling sedikit AB Rh<sup>+</sup> 3.567 (7,73%) dan AB Rh<sup>-</sup> 1 (0,00%). Mayoritas jenis kelamin pendonor adalah laki-laki 35.721 (77,47%), untuk perempuan 10.388 (22,53%). Mayoritas usia pendonor 18-24 tahun 13.335 (28,92 %) sedangkan paling sedikit usia 17 tahun 317 (0,69%) pendonor. Mayoritas jenis pendonor sukarela ulang 33.602 (72,88%) dan sukarela baru 12.507 (27,12%) dari total 46.109 pendonor.

**Kesimpulan:** Produksi darah dan karakteristik pendonor darah di UTD PMI Kota Yogyakarta tahun 2019 memiliki frekuensi yang berbeda.

Kata kunci: Produksi, Karakteristik, Pendonor Darah, Golongan Darah, ABO dan Rhesus

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**BLOOD PRODUCTION AND BLOOD DONOR'S CHARACTERISTICS BASED ON ABO AND RHESUS BLOOD GROUPS AT INDONESIAN RED CROSS BLOOD TRANSFUSION SERVICE YOGYAKARTA CITY IN 2019**

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**ABSTRACT**

**Background:** Blood type is a unique characteristic of blood in individuals because of the different kinds of carbohydrates and proteins on the surface of red blood cell membranes which classified into blood type A, B, O, and AB. In addition to proteins A and B, there is a factor of rhesus blood type that is positive and negative. Suitability of blood types are very crucial when used for blood transfusion purposes. Proper grouping of blood groups can minimize the risk of transfusion reactions to recipients.

**Objective:** To identifies the blood production and characteristics of blood donor based on the ABO blood group and Rhesus, gender, age, and donor type in the Blood Transfusion Service of Yogyakarta's Indonesian Red Cross in 2019.

**Method:** The design of research is descriptive retrospective.

**Result:** The majority of blood groups production is O Rh<sup>+</sup> 17.165 (37,23%) and O Rh<sup>-</sup> 47 (0,10%), while the fewest is AB Rh<sup>+</sup> 3.567 (7,73%) and AB Rh<sup>-</sup> 1 (0,00%). The majority of blood donor's gender are male 35.721 (77,47%), for female 10.388 (22,53%). The majority of blood donor's age is 18-24 years old 13.335 (28,92 %) the fewest is 17 years old 317 (0,69%). The majority of type of donor is routine voluntary blood donors 33.602 (72,88%) and new voluntary blood donors 12.507 (27,12%) from 46.109 blood donors.

**Conclusion:** Blood production and donor's characteristics at UTD PMI of Yogyakarta city in 2019 have different frequencies.

**Keywords:** Blood Production, Characteristic of Blood Donors, Blood Groups, ABO and Rhesus

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