

Distribution of ABO & Rh Blood Groups Among Blood Donors of Kolar: A 5 Years Study

The frequency of ABO and Rhesus- D blood groups vary from one population to another. There are no data available for Kolar, Karnataka. Our aim was to determine the distribution of different blood groups in this region. ABO and Rh blood grouping were carried in our blood bank by standard tile techniques with appropriate positive and negative controls using one drop of whole blood mixed one drop of appropriate anti-sera and rocked gently. In case of doubt, the test was examined under a microscope or the results were confirmed by reverse grouping using known group A and B red cells. Data on the frequency of ABO and Rh-D blood groups were reported in simple percentages. We studied 25, 134 donors, including 24, 218 males and 916 females. Our study showed "O" group to be high, viz, 9910 (41.77%) followed by "B" group 7534 (31.75%) The Rh-D negative phenotype was found among 5.59% of the samples tested. This study seeks to provide data on ABO and Rh-D group distribution amongst the blood donors in the Kolar district. The collation of immuno - hematology data would, therefore, enhance sustainable regional blood bank services Kolar district. The ABO blood groups and Rhesus (Rh) blood group antigens are the most frequently studied genetic markers in a large group of people. Despite the long list of several other blood groups discovered so far, the ABO blood groups hold a respectable position in view of the safety of blood/blood products transfusion to date.^[1] The knowledge of the distribution of

Table 1: Distribution of ABO and RhD blood amongst the blood donors of Kolar

ABO	Rh-D (+)		Rh-D (-)	
A	4940	(20.82)	332	(23.89)
B	7534	(31.75)	365	(25.86)
O	9910	(41.77)	644	(45.64)
AB	1344	(5.66)	65	(4.61)

ABO and Rh blood groups is essential for effective management of blood bank inventory, be it a facility of a smaller local transfusion service or a regional or national transfusion services.^[2] It is believed that the study would help us in the planning and establishment of an effective transfusion services that would meet the ever-increasing demand for safe blood and blood products.^[3]

REFERENCES:

1. Nilson Sojka B, Sojka P. The blood-donation experience: Perceived physical, psychological and social impact of blood donation on the donor. Vox Sang 2003;84:120-8.
2. Winwanitkit V. Knowledge about blood donation among a sample of Thai university students. Vox Sang 2002;89:97-9.
3. Masser BM, Hyde MK, Terry DJ. The psychology of blood donations: Current research and future directions. Transfus Med Revell 2008;22:215-33.

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