

Data on ABO and Rhesus Blood Groups Among Kamars— A Primitive Tribal Population of Madhya Pradesh

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ABSTRACT The blood groups ABO and Rh(D) have been studied in 120 unrelated individuals belonging to both the sexes of the Kamar tribal population of Raipur district in Madhya Pradesh. The observed gene frequencies for ABO locus are 0.3428 for A, 0.2763 for B and 0.3809 for O. The Rh(D) negative group is observed to be absent in the present study.

INTRODUCTION

The tribal population of Kamars is an identified primitive tribal group (PTG) of Madhya Pradesh mainly inhabiting the south-eastern part of Raipur district. The Kamars economy chiefly depends on their traditional occupation of bamboo basketry. According to Census, 1981 their population figure in Raipur district is 14,126. In the present study an attempt has been made to study the distribution of ABO and Rh(D) blood groups among the Kamars of Raipur district. Furthermore, the findings of the ABO blood groups among the Kamars has been compared with the earlier studies of the other tribal population of Madhya Pradesh to assess the genetic variation.

MATERIAL AND METHODS

Blood samples from 120 unrelated Kamars were collected from Kularighat, Baragobra and Timanpur villages of Mainpur tehsil of Raipur district. The samples were analysed for ABO and Rh(D) blood groups using standard antisera with adequate controls. The frequencies are calculated after Mourant et al. (1976).

RESULTS AND DISCUSSION

Distribution of ABO blood group among the Kamars is presented in table 1, the frequency of A blood group is highest (38.33%) which is followed by B (29.17%) and then AB (18.33%). Only in 17 (14.17%) cases, O blood group were detected. It is also observed from table 1 that the frequency of A gene is proportionately high in comparison to B gene and there is no significant difference between the observed and expected frequencies.

The percentage distribution of Rh(D) among the Kamars is presented in table 2. The Rh(D) negative group is observed to be absent among the Kamars.

To assess the genetic variation with respect to ABO blood groups, the findings among Kamars have been further compared with the earlier studies on the other tribal populations of Madhya Pradesh. On comparison in this account the Kamars differ significantly with Marias and Bhatras of Bastar (Negi and Ahmad, 1962); Kanwar and Gonds of Bilaspur (Negi, 1963) and Bunjhias and Bade Binjhars of Chattisgarh (Sen, 1975).

Table 1: Distribution of ABO blood groups among Kamars.

Phenotype	Number observed	Number expected	Gene frequencies
A	46	45.44	$A = 0.3428$
B	35	34.42	$B = 0.2763$
AB	22	22.73	$O = 0.3809$
O	17	17.41	
Total	120		$\chi^2 = 0.0498$

Table 2: Distribution of Rh(D) blood groups among Kamars

Rh System	Observed number	Gene frequency
Rh (+ive)	120	$d = 0.0000$
Rh (-ive)	0	$D = 1.0000$
Total	120	1.000

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