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ABO and Rh Blood Group Distribution Among Kunbis (Maratha) population

of Amravati District, Maharashtra.

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2

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**ABSTRACT** 

The present study reports the distribution of ABO and Rh blood groups among the Kunbis

(Maratha) population of Amravati district. The phenotypic frequency of blood group B is observed

highest (33.06) percent, O (31.04), A (27.02) and AB is lowest (08.33) percent. The phenotypic

frequency of Rh negative is (04.26) percent. The Kunbis (Maratha) population shows close genetic

relationship with the Gujratis.

KEYWORDS: Blood group, variation, Maratha Kunbis, Vidarbha.

## INTRODUCTION

In the present paper, we studied the distribution of ABO and Rh blood group among the Kunbis (Maratha) population of Amravati district, Maharashtra. Kunbi was claimed to have been warriors and land lord having their roots in Maharashtra. They belong to the Hindu cast and are considered as close to the upper class Brahmin from the same geographical location. One rung of the ladder of social advancement is to provide oneself with Rajputs origins. Kunbi are widely distributed in different parts other than Maharashtra, are Karnataka, Gujarat, Goa and Madhya Pradesh. They speak the Marathi, one of the major languages of Indo-Aryan language group. The Kunbis number 193,255 or 24 per cent, of the population (Census of India 2001). They are

overwhelmingly the most important caste in the district, and the Kunbi has come to be the accepted type of all Maratha cultivators.

## MATERIAL AND METHODS

1500 blood samples are collected in to EDTA vials from different Kunbis residing areas of Amravati district. All samples are tested for the ABO and Rh blood groups using anti - A, anti -B and anti - D sera. Gene frequencies are calculated by Hardy-Weinberg principle using the WinBug program (Spiegelhalter, et al., 2003).

## RESULTS AND DISCUSSION

The distribution of the ABO and Rh blood groups among the Kunbis population of Amravati district is shown in the table 1. Blood group B predominates in distribution with the highest frequency (33.06%) fallowed by blood group O (31.04%) and blood group A (27.02%). The frequency of allele B is quite high (0.2354) as compared to A (0.1978). The frequency of Rh negative is (d = 0.2065).

Roychoudhury (1977a) used smaller number of genetic loci and observed the genetic relationship of Kunbi (Maratha) and Gujratis which is closer to each other than to the Hindus of Madhya Pradesh.

# **Reference:**

Census of India (2001). Data from the 2001 Census includes cities, villages and towns (provisional).

Roychoudhury AK (1977a). Gene diversity in Indian populations. *Hum Genet* **40**:99.

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Table 1: Distribution of the ABO and Rh blood groups and their allele frequencies among Kunbis

# (Maratha) population of Amravati district.

Blood Group	No	Phenotypic frequency in %	Allelic Frequency
A	408	27.02	A = 0.19788
В	496	33.06	B = 0.23543
AB	125	08.33	O = 0.56666
0	471	31.04	
Rh Blood Group			
Rh + ve	1436	95.73	D = 0.97843
Rh - ve	64	04.26	d = 0.20655