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INCIDENCE OF COLOUR BLINDNESS
AMONG THE NICOBARESE OF CAR-
NICOBAR ISLAND

Abstract — Present study is an effort to report the distribution of colour blindness among the 781 unrelated Nicobarese of Car-Nicobar Island (490 males and 291 females). The incidence of colour blindness among the male and female Nicobarese is noticed to be 2.65 percent and 0.34 percent respectively. The comparison of male Nicobarese with other mongoloid tribal populations of North-Eastern India with regard to colour blindness shows higher incidence (2.65 percent) than the Riangs (1.54 percent) and Lushais (1.78 percent) and lower incidence than the Khasis (3.85 percent), Rana Tharus (3.71 percent), Andros (4.0 percent), Meiteis (8.57 percent) and Tangkhul (6.72 percent).

Key words: Colour blindness—Nicobarese—Car-Nicobar Island.

Many studies during the present century have established the inheritance of colour blindness, the best example of sex-linked recessive character in man (Gates 1946, Winchester 1966 and Adam 1969). The perception for colour vision has been known to differ in certain persons from the normals. The capacity of a person to discriminate the range of colours appear to be important in the diagnosis of a person in respect of normal or of the defective colour vision. The purpose of the present study is to report the incidence of colour blindness among the Nicobarese of Car-Nicobar Island. According to 1971 census there were 18,000 Nicobarese, of whom about two-thirds inhabited the Car-Nicobar. The Nicobarese belong to Mongolian stock and their language belongs to Mon-Khmer group of languages. The detailed ethno-history of this tribe is dealt by Boden Kloss (1903) and Man (1886).

Material and Method

The material for the present study is based on the data collected from the five villages of Car-Nicobar namely—Tee-top, Sawaii, Arong, Jayanti and Mus. On the whole 781 individuals (490 males and 291 females) were examined for their perception to colours by the help of Ishihara Chart (1958). The literate persons were asked to read the plates and the illiterate persons were asked to trace the lines. All the persons were tested in adequate day light.

Results and Discussion

Table 1 shows the occurrence of Colour blindness among the Nicobarese of Car-Nicobar Island. The incidence of Colour blindness in the pooled sample of males and females is observed to be 2.65 percent and 0.34 percent respectively.

Percentage distribution of Colour blindness among the available mongoloid tribal male populations of North-Eastern India is presented in Table 2 and compared with the male Nicobarese of the present study. It is seen from the table that the incidence of colour blindness vary from 1.54 percent

TABLE 2. Percentage Distribution of Colour Blindness in some of the Mongoloid tribal male population of North-Eastern India

Population	Place	No.	Colour Blindness	Authors
Riang	Tripura	195	1.54	Kumar et al. (1961)
Khasi	Meghalaya	340	3.85	Mukerjee (1963)
Lushai	Mizoram	224	1.78	Mukerjee (1963)
Rana Tharu	Nainital	350	3.71	Kumar (1968)
Andro	Manipur	125	4.00	Singh (1978)
Meitei	Manipur	105	8.57	Singh (1982)
Tangkhul	Manipur	134	6.72	Singh (1978)
Nicobarese	Car-Nicobar	781	2.65	Present Study

TABLE 1. Frequency Distribution of Colour Blindness among the Nicobarese of Car-Nicobar

Sl. No.	Locality	MALES				FEMALES					
		Total No. tested	Normal		Colour-blind		Total No. tested	Normal		Colour-blind	
			No.	%	No.	%		No.	%	No.	%
1.	Tee Top	23	22	95.65	1	4.35	21	21	100.00	—	0.00
2.	Sawai	125	120	96.00	5	4.00	60	59	98.33	1	1.67
3.	Arong	28	28	100.00	—	0.00	16	16	100.00	—	0.00
4.	Jayanti	155	152	97.39	3	2.61	80	80	100.00	—	0.00
5.	Mus	159	155	97.48	4	2.52	114	114	100.00	—	0.00
	TOTAL	490	477	97.35	13	2.65	291	290	99.66	1	0.34

in Riangs to 8.57 percent in Meitei's. The incidence of colour blindness among the male Nicobarese is high in contrast to the Riangs of Tripura (Kumer et al. 1961) and Lushai's of Mizoram (Mukerjee, 1963), whereas the frequency of colour blindness is observed to be relatively low in comparison to Khasi's of Meghalaya (Mukerjee, 1963), Rana Tharu's of Nainital (Kumar, 1968), Andros, Meitei's and Tangkhul of Manipur (Singh, 1978, 1982)

Conclusion

The incidence of colour blindness among the male and female Nicobarese of Car-Nicobar is noticed to be 2.65 percent and 0.34 percent respectively. The comparison for the incidence of colour blindness of male Nicobarese with other mongoloid tribal male populations of North-Eastern India shows higher incidence (2.65 percent) than the Riangs (1.54 percent) and Lushai's (1.78 percent) and lower incidence than the Khasis (3.85 percent), Rana Tharus (3.71 percent), Andro's (4.0 percent), Meitei's (8.57 percent) and Tanghuls (6.72 percent).

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