

Consanguinity and Its Effects on Differential Fertility and Mortality in Two Caste Populations of Andhra Pradesh, India

B.V. Babu^{*}, G. Sudhakar¹, C. Parvatheesam¹ and V. Padma¹

^{}Department of Anthropology, Andhra University, Visakhapatnam 530 003, Andhra Pradesh, India*

¹Department of Human Genetics, Andhra University, Visakhapatnam 530 003, Andhra Pradesh, India

KEYWORDS Genetic Demography. Inbreeding. Fertility. Mortality. Genetic Load. Andhra Castes

ABSTRACT Data on marriage type, fertility and mortality among Rajaka and Koppala Velama caste populations of Andhra Pradesh, India are utilized to report the degree of consanguinity and its effect on reproductive outcome. About one third of the total marriages are consanguineous in these populations. The present study confirms the hypothesis that fertility would be greater in consanguineous couples to compensate for the high mortality that will be experienced due to inbreeding. The prenatal wastage is significantly higher among consanguineous group. The genetic load analysis also reveals the strong positive association of inbreeding with prenatal and overall total mortality. The association between inbreeding and postnatal mortality is not significant. The values of A, supposed to be an index of public health conditions, are relatively higher. In general, the load is mainly due to mutation-selection balance. The results are discussed in the light of various hypothesis on inbreeding effects.