An Estimate of Genetic Load in The Nayars of Alappuzha, Kerala

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ABSTRACT A sample of 1191 marriages of the Nayars of Alappuzha district of the state of Kerala was studied for estimating the component of genetic load operating in the prenatal and postnatal stages. Consanguinity-associated prenatal and postnatal mortality was found to be 1.88 to 5.6 times higher than control. The genetic burden manifested in total prereproductive mortality was estimated between 2.366 and 2.424 lethal equivalents per gamete, suggests that an average person carries 5 lethal equivalent genes finding expression between birth and maturity. The high B/A ratio (41.53) is suggestive that mortality disclosed by inbreeding in the group is predominantly from mutational load.