

Preface

It is interesting that while extensive anthropological data of the multiracial multiethnic population of India had been made available early in the last century, human genetics related to disease has been lagging behind.

From 1970 onwards medical genetic services has developed only in some institutions in a few big cities under a handful of workers unconnected with mainstream medicare and public health programmes (Penchaszadeh 1993). Even now although prenatal diagnosis and *in vitro* fertilization for sterility has developed after legalisation of termination of pregnancy, the detection of genetic disease affecting the fetus or newborn is not carried out except in a few large institutions. A large number of newborn and children still die every year due to undiagnosed conditions. Some like Downs syndrome or thalassaemias and haemoglobinopathies are detected but the majority are not despite reports of familial disorders being present.

The present issue of the International Journal of Human Genetics attempts to fill up some of the lacunae of our knowledge regarding the common inherited diseases in India.

It is well known that multifactorial complex diseases are becoming the main causes of morbidity and mortality in our country. Due to several susceptibility genes with unknown penetrance usually being involved the studies

are difficult. However the large pedigrees available and the extent of caste endogamy as well consanguinity seen in certain populations provide extensive materials for study. More studies need to be carried out also among our numerous tribal populations who provide closed communities.

With development of molecular methods of gene detection this would give rise to interesting discoveries regarding diseases like congenital defects in newborn, diabetes, coronary heart disease, cancers and immunological deficiencies to mention a few.

It is not possible to cover all diseases however common but a few conditions have been presented in the present issue. It may be noted that chromosomal diseases have not been included as these have been extensively discussed in previous issues of the Journal so also commonest single gene disorders like thalassaemias which also have been published earlier. The present issue deals with common multifactorial conditions found in India and found to be developing into a health hazard.

It is hoped that this issue would be useful in planning public health measures so that genetic counseling can be made mandatory for family welfare planning units. The necessity of ascertaining external environmental factors in the causation of these conditions are also required to provide preventive measures in life style, diet and environmental pollution.

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