ADOLESCENT, INFANT AND TODDLER
MORTALITY AND MORBIDITY
IN
CENTRAL AUSTRALIA
1965 - 1969

A Thesis submitted for the Degree of
Doctor of Medicine
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SUMMARY

The thesis describes, in some detail, the historical, social and environmental factors which have led to the present poor state of Aboriginal child health. High mortality and morbidity rates, amongst infants and schoolchildren in Central Australia, during the five year period from 1961 to 1969, are discussed and many relevant data presented.

The most common causes of sickness and death in this group are Diarrhoeal disease and Respiratory infection. Etiologies of these conditions and therapeutic difficulties are discussed. Geographical variations in morbidity are demonstrated, and an investigation into the relationship between family size, or overcrowding, and infectious rate is described. The results of extensive anthropometric, audiometric and chest X-ray surveys indicating excessively high levels of abnormality are reported.

The role of parasitic malnutrition in potentiating common infectious disease is stressed, and data related to duration of hospital stay and mortality are set out to this end.

Malnutrition is discussed from the standpoints of local significance, classification and diagnosis, incidence in Central Australian children, effect on physical growth and educability and, finally, prevention.
Malnourished children are known to stay longer in hospital and die more readily than their well-fed counterparts. The most satisfactory method of diagnosing and progressing the marasmus type of malnutrition, which occurs commonly in these children, is found to be nutritional anthropometry. Other screening methods have been investigated but found unsuitable for use in remote areas, or inappropriate in marasmus, as distinct from other forms of protein-calorie disturbance. Cytology of buccal smear and skeletal radiography are two such projects, and the findings briefly reported.

Several specific nutritional deficiencies occur. Iron deficiency anaemia, ascorbic acid desaturation, Magnesium deficiency and hypocalcaemia are discussed and their significance delineated. Immune-globulins G and M are regularly above accepted normal levels, and the trends seen related more to age than any specific disease.

A high incidence of growth failure is found in the paediatric Aboriginal community. This is clearly nutritional in origin, rather than endemic, and varies considerably from place to place. A relationship exists between geographical variations in incidence of malnutrition, mortality, morbidity and environmental conditions.

Two problems are recorded, which are highly significant,
In view of the Aborigines' desperate need for education, there is a rising incidence of severe distress from chronic disease and the reduced educability of some children due to malnutrition in infancy.

Finally the main problems are assessed and some solutions suggested which are generally both inexpensive and relatively simple to instigate within the present administrative structure.