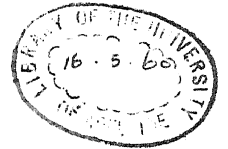


FEATURES OF LEUKAEMIA

by

ROBERT STIRLING COLTON



A T H E S I S

submitted for the

DEGREE OF DOCTOR OF MEDICINE

in the University of Adelaide, South Australia

b y

ROBERT STIRLING COLTON

	<u>Page</u>
<u>INTRODUCTION</u>	
General Purpose of the Thesis	1
<u>DECLARATION AND ACKNOWLEDGMENTS</u>	2 & 3
<u>HISTORICAL REVIEW</u>	4
<u>LITERATURE REVIEW</u>	
I. Comparative Features of Leukaemia	8
II. Mortality Rates	22
<u>LEUKAEMIA IN SOUTH AUSTRALIA</u>	
<u>AND THE COMMONWEALTH</u>	32
I. Hospital Incidence in South Australia.	33
II. Seasonal Distribution and Climatic Factors in the occurrence of Acute Leukaemia in South Australia.	38
III. Geographical Incidence.	40
IV. Mortality Rates.	42
V. Discussion.	47
<u>CONCLUSIONS</u>	61
<u>REFERENCES</u>	65
<u>FIGURES AND TABLES</u>	71

I N T R O D U C T I O N

General Purpose of Thesis

The main purpose of this work was to study certain features of leukaemia in South Australia and to analyse mortality trends of the disease in both this State and Australia as a whole.

An examination was made of the records of all leukaemic patients admitted to either the Adelaide Children's Hospital or the Royal Adelaide Hospital over the period 1933-53.

These were the only general Public Hospitals in South Australia at the time of the survey and there was a single public clinic for radiotherapy attached to the Royal Adelaide Hospital.

It was felt that such circumstances in Adelaide were particularly favourable for this type of investigation, allowing a greater proportion of cases to be traced than has been possible in most other surveys from overseas.

As the disease is uniformly fatal, mortality rates based on data from death certificates is considered to be the most reliable guide to the actual frequency of the condition, but details of features such as type incidence can only be accurately assessed from Hospital records.