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‘The Captain of All These Men of Death’
Aspects of the Medical History of Tuberculosis

A thesis presented in partial fulfilment of the requirements for the degree of

Master of Public Health

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New Zealand

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The painting is said to reflect the death of Munch’s sister, Sophie, who died in 1877 at the age of 15 from tuberculosis. The mother is based on Munch’s aunt, Karen Bjølstad. Munch’s own mother had died in 1868 also from tuberculosis.
Abstract

Current evidence suggests that some time in pre-history the ancestor of the modern tubercle bacillus evolved from a soil organism into a human pathogen. Since that time it has caused death and misery to millions of human beings by causing the infectious disease we now call tuberculosis.

This dissertation examines some of the aspects of the history of tuberculosis and specifically how it has affected humans from early times not only medically but socially. It looks at mankind’s struggle to overcome the disease, those who introduced scientific methods in attempts to halt and defeat the organism and its associated infectious disease. There are descriptions of the effects of the disease on prominent people and how the disease often cut short their productive lives. Stress is placed also on the organism’s ability to adapt and survive in a latent form and to develop virulence factors as and when necessary for its own survival. The advent of the co-infection with HIV/AIDS has caused a major setback in control methods and our attempts to halt the progress of the disease and these are factors in the resultant worldwide epidemic of tuberculosis.

Particular importance is placed on the public health measures used in the past and the importance of continued and improved control measures at the community level now and in the future.

The implementation of the knowledge gained about the disease and the organism to date, the avoidance of the errors made in the past, is emphasised if we are to make progress in the future. To totally defeat the organism remains the major goal of public health agencies, medical researchers and social scientists so we can say that, at last, tuberculosis is no longer the ‘Captain of all these Men of Death’.
Acknowledgements

No Man is an Island, entire of itself.
John Donne (1571-1631)

My wife, Mairi, a registered nurse, has been a major supporter in the production of this thesis. Not only has she acted as a proof reader but a constant source of encouragement, stimulus and common sense. I am, as ever, grateful to her and acknowledge her contribution with thanks.

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Above all I have to give thanks to the doctors and nurses of the former Tor-na-Dee Sanatorium in Aberdeen, Scotland who were responsible for restoring my health and making it possible for me to pursue a career in Academic Medicine and Paediatric Respiratory Medicine and hence ultimately to submit this dissertation.
Preface

*Tuberculosis Robs You, Public Health Protects You*: ca. 1935

‘*Pasteur worked to protect individuals through immunization, Koch worked to protect communities through better hygiene and Public Health*’
Blevins and Bronze (2016)

‘The Captain of all these Men of death’. ‘Under Captain Consumption, he rots away, and dies in sinful security’.

John Bunyan (1680). The Life and Death of Mr. Badman. (Chapter XVIII)
Abbreviations

1. HIV: Human Immunodeficiency virus
2. AIDS: Acquired immunodeficiency syndrome
3. TB: Tuberculosis
4. MDRTB: Multiple drug resistant tuberculosis
5. XDRTB: Extensively drug resistant tuberculosis
6. XXDRTB: Extremely drug resistant tuberculosis
7. WHO: World Health Organisation
8. MTB: Mycobacterium tuberculosis
9. DNA: Deoxyribonucleic acid
10. PCR: Polymerase chain reaction
11. USA: United States of America
12. UK: United Kingdom
13. AAFB: acid and alkali fast bacteria
14. BCG: Bacille Calmette-Guérin
15. PAS: p-aminosalicylic acid
16. MMR: mass miniature radiography
17. IUAT: International Union Against Tuberculosis
18. IUATLD: International Union Against Tuberculosis and Lung Disease
19. bTB: Bovine tuberculosis
20. DOTS: Directly observed treatment – short term
21. WW2: World War Two
22. ART: Anti-retroviral treatment
23. IGRT: Interferon gamma release test
24. ARV: antiretroviral drugs
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frontispiece</td>
<td>ii</td>
</tr>
<tr>
<td>Abstract</td>
<td>iii</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>iv</td>
</tr>
<tr>
<td>Preface</td>
<td>v</td>
</tr>
<tr>
<td>Abbreviations</td>
<td>vi</td>
</tr>
<tr>
<td>Table of Contents</td>
<td>vii</td>
</tr>
<tr>
<td>List of Figures</td>
<td>x</td>
</tr>
<tr>
<td>List of Tables</td>
<td>xiv</td>
</tr>
<tr>
<td><strong>Chapter 1: Introduction, Materials and Methods</strong></td>
<td>1</td>
</tr>
<tr>
<td>1.1: Introduction</td>
<td>1</td>
</tr>
<tr>
<td>1.2: Methods and Materials</td>
<td>4</td>
</tr>
<tr>
<td><strong>Part 1: The Historical Background</strong></td>
<td>6</td>
</tr>
<tr>
<td>Chapter 2: In the Beginning</td>
<td>6</td>
</tr>
<tr>
<td>Chapter 3: The Era of Phthisis and Consumption</td>
<td>11</td>
</tr>
<tr>
<td>3.1: The Early Years</td>
<td>11</td>
</tr>
<tr>
<td>3.2: The Middle Years</td>
<td>13</td>
</tr>
<tr>
<td>3.3: The Saints</td>
<td>16</td>
</tr>
<tr>
<td>Chapter 4: Towards a Science Based Solution</td>
<td>19</td>
</tr>
<tr>
<td>4.1: Laënnec</td>
<td>22</td>
</tr>
<tr>
<td>4.2: Villemin</td>
<td>26</td>
</tr>
<tr>
<td>4.3: Koch</td>
<td>27</td>
</tr>
</tbody>
</table>
10.1: Posters 84
10.2: Postage stamps 93
10.2.1: Cancellations and slogans 96
10.3: Christmas seals 97

Chapter 11: Public Health and Bovine Tuberculosis 100

Chapter 12: The Resurgence of Tuberculosis: ‘How, When and Why’ did it all go wrong? 104

Chapter 13: The Fight Back 111

13.1: Directly Observed Treatment – Short Term (DOTS) 111
13.1.1: DOTS-Plus 113
13.2: Stop TB 115
13.3: HIV/AIDS 118
13.4: Immigrant screening 121
13.5: Advances in diagnosis 123

Chapter 14: Dealing with Mycobacterium tuberculosis drug resistance. 126

Chapter 15: What does the future hold? 130

Chapter 16: Discussion and Conclusions 138

References 142
### List of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Frontispiece: <em>The Sick Child</em> by Edvard Munch</td>
<td>ii</td>
</tr>
<tr>
<td>2.</td>
<td>The Head of Medusa representing the disease</td>
<td>4</td>
</tr>
<tr>
<td>3.</td>
<td>Mayan figurine depicting a tuberculous spinal kyphosis</td>
<td>9</td>
</tr>
<tr>
<td>4.</td>
<td>Hippocrates and Galen</td>
<td>12</td>
</tr>
<tr>
<td>5.</td>
<td>Hippocrates and Allegory of Health</td>
<td>12</td>
</tr>
<tr>
<td>6.</td>
<td>Touching for the King’s Evil</td>
<td>15</td>
</tr>
<tr>
<td>7.</td>
<td>Medieval Doctor making a diagnosis</td>
<td>16</td>
</tr>
<tr>
<td>8.</td>
<td>Saint Pantaleon</td>
<td>17</td>
</tr>
<tr>
<td>9.</td>
<td>Saint Thérèse of Lisieux</td>
<td>18</td>
</tr>
<tr>
<td>10.</td>
<td>Jan Steen, <em>The Doctor’s visit</em></td>
<td>20</td>
</tr>
<tr>
<td>11.</td>
<td>Early microscopes</td>
<td>21</td>
</tr>
<tr>
<td>12.</td>
<td>Portrait of Laënnec</td>
<td>22</td>
</tr>
<tr>
<td>13.</td>
<td>Laënnec auscultates a patient at the Necker Hospital</td>
<td>24</td>
</tr>
<tr>
<td>14.</td>
<td>Original Laënnec stethoscope and modern equivalent</td>
<td>25</td>
</tr>
<tr>
<td>15.</td>
<td>J-A Villemin</td>
<td>26</td>
</tr>
<tr>
<td>16.</td>
<td>Robert Koch</td>
<td>27</td>
</tr>
<tr>
<td>17.</td>
<td>Centenary of Koch’s discovery of the tubercle bacillus</td>
<td>29</td>
</tr>
<tr>
<td>18.</td>
<td>Examples of the international centenary celebration of Koch’s discovery</td>
<td>29</td>
</tr>
<tr>
<td>19.</td>
<td>Celebration of Röntgen’s achievements</td>
<td>30</td>
</tr>
<tr>
<td>20.</td>
<td>Fluoroscopy</td>
<td>30</td>
</tr>
<tr>
<td>21.</td>
<td>John Keats’ gravestone and stamp image</td>
<td>33</td>
</tr>
<tr>
<td>22.</td>
<td>Plaque to Stevenson at Adirondack Sanatorium and stamp of Dr. Trudeau</td>
<td>36</td>
</tr>
<tr>
<td>23.</td>
<td>Stevenson’s house at Vailima, Samoa</td>
<td>36</td>
</tr>
</tbody>
</table>
24. Robert Louis Stevenson and stamp image of his tomb
25. Alice Neel: *TB Harlem.*
26. Christobal Rojas: *Le Miseria*
27. Fidelio Ponce de Leon: *Tuberculosis.*
28. Richard Cooper, *Sickly female invalid*
29. Pablo Picasso: *Pobres genios.*
30. Paul Ehrlich and von Behring
31. Leysin Sanatorium
32. Treatment for TB at Mearnskirk Hospital, Glasgow, Scotland
33. The statue of Edward Trudeau at the Trudeau Institute
34. Trends in mortality for tuberculosis in Western Europe, 1774-1985
35. Advertisement for sanatorium care
36. Albert Calmette and Camille Guérin
37. Celebration of the First Human Inoculation of BCG
38. Promoting BCG use
39. Carlo Forlanini, pioneer of the artificial pneumothorax
40. Pneumothorax procedure, 1941
41. Radiograph of plomage performed many years previously
42. Selman Waksman
43A. Tuberculosis notification rate for New Zealand, 1922-2004
43B. Cashmere Hills Sanatorium, Christchurch, circa 1920
44. First New Zealand Charity Stamps
45. Health Promotion poster, 1930
46. Early New Zealand Christmas seals
47. Dr. Elizabeth Gunn, Health Camp founder
48. Archival letter on tuberculosis control
75. Louis Pasteur  
76. Incidence rates of tuberculosis per 100,000 persons in Harlem, New York City from 1970 – 1989  
77. Tuberculosis incidence in New York City in 1992, plotted by decile of neighbourhood rates of poverty and abject poverty  
78. Number of Tuberculosis cases in New York City, according to birthplace, 1992-2013  
79. Number of Patients with Tuberculosis in New York City and Number Receiving Directly Observed Therapy at the End of Each Year, 1978 – 1994  
80. Road map and key actions to address childhood tuberculosis  
81. Trends in tuberculosis case notification rates for selected countries  
82. Double Trouble – TB and HIV  
83. GeneXpert 4 module machine  
84. Tuberculosis sufferer in India  
85. Edvard Munch, ‘The Dead Mother’  
86. ‘Facing Death’
List of Tables

1. Anti-tuberculosis agents available in 2013. 62
2. Ethnic distribution of notified tuberculosis in 2015 67
3. DOTS based upon the original work of Karel Styblo. 113
4. Outline of DOTS-Plus proposed programme. 115
5. Eight specific objectives of the WHO Secretariat for 2006–2015. 117
6. Tuberculosis screening algorithm for applicants aged ≥2 years in countries with a tuberculosis incidence rate estimated by the World Health Organisation at ≥20 cases per 100,000 of the population. 123
7. Selected new anti-tuberculosis drugs. 127
8. The essential components of a TB prevention and control program. 133