Balwyn Historical Society News August 4, 2020

With very best wishes to all of you under Level 4 restrictions. It is now clear that we will not be able to hold face-to-face meetings until October at the earliest. We will keep you informed as to future plans. In the meantime, stay safe and stay well.

Thank you to all who have contributed video clips, jokes and articles to keep us all amused! Keep them coming!

Your BHS Committee (Marilyn, Matthew, Pat, Barbara and Heather)

When the bubonic plague came to Australia By

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A popular image from the 17^{th} century of the Plague doctor wearing a beaked bird like mask to protect the wearer from the foul odours associated with the plague.

Introduction

Most of us think of the bubonic plague, or Black Death, as something that occurred in the mid-14th century which killed half the population of Europe and Asia or the London plague of 1665 which wiped out almost a quarter of the population. Bubonic plague is caused by the bacterium *Yersinia pestis (Y pestis)* and is commonly spread by rats. The bacterium first infects the rat flea which then infect the rats. The fleas move from rats to human who, when bitten, become infected. The connection between rat infestations and the plague has been known for centuries but the precise means of transmission was not known until the early 20th century.

In 1894 during the Hong Kong outbreak of plague, the French government sent a Swiss Doctor Alexandre Yersin to study it. He isolated the bacillus both from human subjects and affected rats and provided the evidence of the direct link between rats and the plague. In 1898 a scientist, Paul Louis Simon, at the Pasteur Institute in Paris showed that fleas could transmit the plague between affected and unaffected rats housed in separate cages. In

1902, John Ashburton Thompson, the chief medical officer In the New South Wales Board of Health together with Frank Tidswell and William George Armstrong isolated *Y pestis* from fleas taken from rats in Sydney. Their discovery created the first scientific understanding that infectious diseases could be spread from one human to another by insects and that infections could be derived from animals. Importantly, their discovery changed public health methods in dealing with the plague (*National Museum of Australia*). "Their detailed records now rank amongst the classical literature of the world on the epidemiology of the plague" (*Cumpston et al*)

Australia and New Zealand experienced the last part of the third great world pandemic of bubonic plague. This third pandemic of plague is thought to have begun in northern China in the late 19th century and spread along the trade routes causing devastation in its path. By 1894 Hong Kong was infested with plague and in 1898 it reached Noumea, Madagascar and Jeddah. By 1899 it had spread throughout the world and was in San Francisco, the Malay states, the Philippines, Buenos Aires, Japan, Oporto, Lisbon, the Persian Gulf and the Red sea ports.

It is estimated that between 1900 and 1925 there were 12 major bubonic plague outbreaks in about 27 different locations in Australia with 1371 cases taking 535 lives across the country. Most deaths s occurred in Sydney but there were also sporadic outbreaks and a few deaths in Melbourne, Adelaide, Fremantle and Townsville. The first case of bubonic plague in Australia was reported in Sydney in January, 1900 (*University of Sydney School of Medicine*).

The plague in Sydney

The colonial authorities, aware of the spread of the plague throughout the world and knowing that Australia was on the main shipping routes, anticipated an outbreak of the plague as Australia. A medical garrison was placed on alert at the North Head Quarantine Station. The first victim of the plague in Australia was Arthur Paine, a 33-year-old delivery man, who worked at Central Wharf, Sydney where a ship containing infected rats was docked. He was bitten by a flea on his foot and became very ill. His attending physician confirmed that this was a case of plague and reported it to the New South Wales Board of Health on January 19, 1900. About a month later there was the first plague fatality, a Captain Thomas Dudley who lived near the wharves began showing symptoms.

By the beginning of February 30 cases had been reported and alarm grew that the colony was at the beginnings of an epidemic. In February intensive cleaning began in infected neighbourhoods using lime, carbolic water and lime chloride to disinfect houses and various forms of waste were burned. According to the NSW State Archives and Records "local residents were employed to undertake the cleansing, disinfecting, burning and demolition of the infected areas, including their own homes." Quarantine areas were established. The New South Wales government architect and engineer organised whole precincts be barricaded off and slums demolished in efforts to quarantine neighbourhoods.



Exeter Place, Sydney demolished in 1900 Photography by Mr John Degotardi, Public Works photographer





Hunt Street, Sydney. Cleansing of homes and destruction of waste near Haymarket demolished

Wexford St,

As is common in troubled times, many people began to panic. The worst cases of the plague were in the slums around Darling Harbour. Those who could afford it fled the city.

Newspapers began to publish horrifying stories of the Black Death and the names of those infected or deceased were published daily (*McNally, 2015*). Migrants were blamed for causing the epidemic due to their poor hygiene practices. Wexford Street, in the above photo, was inhabited mainly by Chinese migrants and the street demolished.

In March 1900, a rat extermination program began. The New South Wales government agreed to pay two pence for each rat carcase delivered to an incinerator in Bathurst Street. Some councils paid six pence per rat which made rate catching quite profitable. It is estimated that government employees killed 108,000 rats although this number may have been exceeded by individuals killing rats by poisoning them. However, as evidence was mounted that the plague was due to an epizootic infection in rats and authorities in NSW began to organise preventative means of rats entering ports.



City of Sydney Ratcatchers during the plague epidemic

The last case of the 1900 epidemic occurred in August by which time 303 cases had been recorded with 103 deaths. There was then something of an intermission. In 1902 there were 139 cases and 39 deaths. Intermissions continued followed by outbreaks each year ending with one 1905 with 18 cases and five deaths and a final outbreak in 1906 with 20 cases of which eight were fatal *Cumpston et al*).

The plague spreads in Queensland

The plague spread usually from the ports. The origins of the outbreak in Queensland is thought to have been spread by shipping from Sydney to Brisbane. The outbreak of plague alarmed the colonial governments and in Queensland plague hospitals were erected in towns up and down the east coast of Australia. The plague travelled up the coast infecting

the coastal ports and by April, 1900 reached Townsville. Between 1900 and 1909 there were 499 cases of plague in Queensland with 219 deaths.

The plague in Melbourne

Precautionary measures were taken in Melbourne. In March 1900, when the Board of Public Health engaged men to catch and destroy rats on the Yarra wharves (The *Argus, 30 March 1900*). When the *ss Australian* arrived in Melbourne from Sydney in April, a case of plague was identified on board and the victim sent into isolation at the Nepean Quarantine Station.

However, by 8 May, 1900 the plague had reached Melbourne. *The Ovens & Murray Advertiser* on 12 May 1900 contained the dramatic news:

The affliction which has for so long been dreaded has at length fallen upon Melbourne, and the plague is with us. The first outbreak has occurred in Collingwood...and our Melbourne correspondent informs us that a suspicious case has been noted in Port Melbourne, another populous and not too salubrious locality".

On a calmer note *The Australasian* (also on 12 May 1900) reported that the plague had at last reached Melhourne:

"The patient is a carrier Ernest Cooper, residing with his wife and two young children at 1 Stanleystreet, close to Smith-street. Cooper has a light carrier's van and carts passengers' luggage from the wharves. While waiting for a job he usually stood close to the Little Dock, at the foot of Spencerstreet, where all the infected rats have been caught from time to time during the last month"

During May, 1900 and the following months, the plague spread from cases on the *Cerberus* and the wharves to the Melbourne suburbs. Four young children of a Swedish labourer living in Kensington were found to be suffering from the plague and all were removed to the Quarantine Station. In June, 1900, it was proposed that a plague hospital be built on Coode Island in Port Phillip. It was reported with some excitement and alarm that Dr Gresswell, chairman of the Board of Health, had received a report that serum taken from a suspected patient, a gardener working in Camberwell, contained the bacilli of the bubonic plague. The man, so ill that he was comatose, could not be removed to the Quarantine Station. The report commented that this case one of true plague had caused a sensation in the district! (*The Australian Star* 7 June 1900).

The success of Melbourne in avoiding the spread of the plague in the city is attributed to the medical inspector for the Victorian Board of Public Health, Dr Dan Gresswell, an expert in public health who advocated quarantine stations, fumigation of houses and the clearing of drains. There were eleven cases of the plague in Melbourne in 1901 and 1902 but only two deaths.

Precautions continued to be taken in Melbourne for recurrences of the plague for a number of years. It was understood that the wharves were the most likely places for plague to occur nevertheless it was recommended to Melbourne householders that they should assist in the extermination of rats. It was suggested that if an infected rat was found, it should be doused in kerosene, placed on a spade and taken to the University for examination (*Ballarat Star* September 1921).

Postscript

Today, only Europe, Australia and Antarctica are plague free continents. Recently a few cases of bubonic plague have been reported in Mongolia and China. Bubonic plague is now rare and antibiotics are an effective treatment if the disease is caught early.

Sources

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