



Sarah Metcalfe

# History lessons

There was a time when epidemics were solely the province of infectious diseases. Indeed, most dictionary definitions of the term refer first to contagious diseases that spread rapidly among a given population.

Of the historical human epidemics, plague must be among the most deadly and enduring. It is widely considered responsible for three devastating epidemics: the first the Justinian plague, named for the 6th century Byzantine emperor; the second, and most infamous, the 'Black Death' that began in Asia in the 1300s and is reported to have wiped out 60% of Europe's population; and the third, the Modern Plague, originated in China in the 1860s, killing an estimated 10 million people.<sup>1</sup> Its cause, the bacterium *Yersinia pestis*, was only discovered during this third outbreak when scientists performed autopsies and identified foci of the bacillus within the characteristic buboes – large, tender lymph node swellings that appeared most commonly in the groin of infected individuals.<sup>2</sup> This is the 'bubonic' form of plague and the most common clinical manifestation. Primary pneumonic and septicaemic presentations were more rare, but rapidly lethal.<sup>3</sup>

Plague spreads largely through rodents and their fleas, so its success in times of crowded living conditions and little sanitation is not surprising. What is somewhat more unexpected is that it does still exist today: 2 100 human cases and 180 deaths were recorded in 2003,<sup>4</sup> although most of these occurred in rural areas of developing nations, particularly Africa,<sup>5</sup> where poverty and lack of services foster ideal conditions for transmission.

Even in developing nations, however, where infectious diseases still demand much of the public health attention, age-specific prevalence estimates among urban populations of the non-communicable diseases, such as diabetes, are commonly approaching those found in higher

income countries.<sup>6</sup> Whether these findings can be directly attributed to the lifestyle changes that accompany the increasing affluence of the new urban populations in these countries remains uncertain, but clearly, the association can't be ignored.

For the developed world, this is unarguably an era of chronic disease such that 'epidemic' is more aptly used to describe the prevalence of non-communicable rather than infectious diseases. The causes of spiralling levels of obesity, diabetes and related afflictions are undoubtedly multifactorial, but the common denominator is our modern lifestyle and its affect on our bodies across the lifespan.

This month, we provide an update on the current management strategies for some of these 'scourges of our times'. Grima and Dixon<sup>7</sup> discuss an approach to management of obesity in general practice as well as some of the more specialist interventions that may be necessary. The metabolic syndrome and its place in the risk factor landscape is discussed by Harris<sup>8</sup> and the evolving approach to gestational diabetes, an illness that promises to reach epidemic proportions as the new diagnostic criteria are adopted, is ably explained by Nankervis and Conn.<sup>9</sup> Hogan offers a general practice approach to that elusive and all too common problem of chronic stress.<sup>10</sup>

These growing epidemics are insidious, multi-faceted and complex, and their control at an individual patient level can only go so far. Perhaps we need to learn from the infectious epidemics of the past and focus more of our resources on prevention, not only through direct health interventions, but also at a societal level. Could city planning and food standards legislation be the new pest control and sanitation?

Unless we can start to turn these chronic disease trends around with some of the urgency applied to threatened infectious epidemics, we risk being overwhelmed by them. While the

route these illnesses take us and our patients on is generally much longer and more circuitous than those of the deadly infectious diseases, if unmanaged, the final destination is the same.

## Author

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*Denese Warmington has ended her career at the College and during her time has been instrumental in maintaining the high standards of many College publications. Denese has also been AFP's Production Editor for over a decade. Denese has been a delight to work with, both personally and professionally, and her expertise will be sorely missed.*

*We wish her every success and happiness in the future.*

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