Does history repeat itself in medicine?

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“The longer you can look back, the further you can look forward”

Winston Churchill (1944)

The majority of major discoveries in medicine are unique. Two examples are: William Harvey's (1578–1657) description of the circulation of the blood, published in Exercitatio anatomica de motu cordis et sanguinis in animalibus in 1628,1 and the contributions leading up to the enunciation of the “germ theory” of disease; Louis Pasteur (1822–95),2 Robert Koch (1843–1910),3 and Joseph (later Lord) Lister (1827–1912)4 were largely instrumental in its elucidation. But the underlying idea(s) behind numerous lesser discoveries, which have not attained such a high profile, is often repetitive. Significant lessons for future medical practice can therefore ensue.

An organism is not necessarily causatively related to a disease entity

I cite two outstanding examples at the present time to illustrate this point. A spiral organism which has become definitively designated Helicobacter pylori was demonstrated in the presence of gastritis and peptic ulceration in 1984.5 Since then, this organism has been shown in epidemiological surveys to be widely distributed world wide in the upper gastrointestinal tract of Homo sapiens—but frequently in the absence of localised pathology. Is H pylori therefore the cause of these lesions? There is also an ongoing controversy regarding the causative agent of AIDS. Although the organism designated HIV has been incriminated by most investigators, a minority viewpoint (held by Duesberg and others6) is that this organism is not (by itself at least) the cause of the full blown disease.

Historically, William Osler (1849–1919) was initially far from convinced that the organism described by Alphonse Laveran (1845–1922),7 and Joseph Bazalgette (1819–91)8 designed the “great reformer” of London’s sewerage system.19 This was responsible for many of the common communicable diseases. In this context, although it had little impact at the time, John Snow’s (1813–58) demonstration that Vibrio cholerae is usually transmitted by drinking water contaminated by human faeces was of paramount importance.10 Cholera subsequently became widely designated the “great social reformer”. In the wake of this discovery, Joseph Bazalgette (1819–91) designed and constructed London’s sewerage system.19 This was to a large degree a corollary to the growing supposition that a “contaminated environment” (due to poor standards of sanitation) as outlined by Southwood Smith (1788–1861), was responsible for many of the common diseases. The River Thames, from which London’s drinking water was derived, was at that time heavily contaminated. A further example relates to the history of tuberculosis—arguably
the most important bacterial infection world wide today. John Bunyan (1628–88) termed this disease “The captain of all these men of death”. This situation still pertains—in the presence of HIV/AIDS, increasingly resistant strains of *Mycobacterium tuberculosis* have made this a vast global problem of the 21st century. The *Lancet* recently published an historical paper comparing the diagnosis and management of this disease in the present day with that of 100 years ago.20

In fact the relationship between poverty and disease reflects the content of the Black report, *Inequalities in Health*. This theme, that is, that disease is more prevalent in the underprivileged, can be traced back many centuries—in fact to the Bible!

**Health service management**

Many themes which are currently “topical” were not in fact introduced within the last few years! As an example, Henry Burdett (1847–1920) was, in the late 19th century, a great enthusiast for voluntary hospitals; he also advocated authority of managers over the medical profession, clinical audit, and hospital league tables (in the wake of Florence Nightingale [1820–1910]). Burdett, also incidentally, pronounced that politicians are a “curse of the sick”. This is therefore a further example of recapitulation of historical events which have gone before!

**Conclusion**

Medical history can, and does from time to time, repeat itself. I have given several examples of this. It is therefore of paramount importance that undergraduate curricula should contain more *history of medicine*—for many lessons applicable to the present are to be found in events which have taken place in former times.

This article is based on a paper presented to the Victor Horsley Scientific Session at the BMA Annual Meeting (“Celebrating the past, shaping the future”) on 28 June 2000.


11 Cook GC. Cause of AIDS. *BMJ* 1996;312:1231.


14 Jenner E. *An inquiry into the causes and effects of the variolæ vaccinae, a disease discovered in some of the western counties of England, particularly Gloucestershire, and known by the name of the Cow Pox*. London: Sampson Low, 1798.


