

Should doctors leave the history of medicine to historians?

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There is an apocryphal tale of a surgeon telling his acquaintance of many years that he'd taken up medical history in retirement. "Good for you" his friend, an academic historian replied, "Now that I am off the academic treadmill, I think I'll do a bit of brain surgery". During a life-changing sabbatical at the Wellcome Institute for the History of Medicine in the mid-1990s I sensed some disdain among historians for "doctors' history". In my own retirement, I have published two books, ostensibly historical.(1, 2) Being inescapably a doctor rather than a historian I want to avoid becoming the butt of the historian's quip, so I tread warily.

Hooked on heart surgery from a young age, I took the pre-registration job I wanted with the cardiothoracic surgeons at Guy's Hospital in 1970. It was a long time later that I realised just how influential the thoracic unit had been in overcoming a deeply entrenched resistance to even the notion of heart surgery.(2) In the years following WW2 there was a concerted effort to advance surgery for the benefit of blue babies(3) and adults with rheumatic valvular heart disease,(4) endemic at the time. In the decade before the heart lung machine, they established operations to relieve mitral valve stenosis and pulmonary stenosis and published their first hundred cases of each in the BMJ in 1952 and 1954.(5, 6) But the narrative accounts I heard 15-20 years later, whether at the operating table or in the bar, were inconsistent, contradictory, confused, self-serving or simply false.(7) Seeking to separate fact from fancy I sought out the original records. I systematically traced mentions of mitral stenosis back through time in the Royal Society of Medicine library in a painstaking search of Index Medicus. Eventually I found this written in The Lancet 2 April 1898:

"I anticipate that with the progress of cardiac surgery some of the severest cases of mitral stenosis will be relieved". (8)

This statement was made D W Samways fifty years before the operation of mitral valvotomy was established in clinical practice. I latched onto his words with enthusiasm, revelling in finding the *first* suggestion of surgery for heart disease. But here, I thought, lay the trap of doctors' history. It is a tradition to introduce medical lectures and essays with a nod to history in a "how did we get from there to here" summary of events, usually uncritically taken from previous writers' accounts. That was the sort of thing I had heard historians decry.

There is an analogy to illustrate the point. If you live in an isolated cottage and wake to the early light after a fall of snow and see foot prints coming directly to your door, they suggest a purposeful visit. But if you trace the footsteps in the snow back into the town square, the snow is trampled with footprints heading in all directions. Dr Daniel Samways published well over 100 articles, notes, commentaries and letters between 1896 and 1929 often prompted by the writings of others. His own forthright, critical but always well-reasoned contributions prompted further discourse. Alongside the writings of Samways are clinical reports and opinions heading everywhere, anywhere — and plenty going nowhere. These are the raw reality of contemporary sources, These are now much more readily accessible in the electronic archives of the weekly medical journals and are amenable to more careful reading in the context of other contributions. They are the foundation of my biography of Samways.(1)

An example of such an exchange of letters followed the publication in 1904 of a lecture given by a Liverpool physician James Barr which opened:

Gentlemen, -I wish to introduce to you, and through you to the medical profession, a new method ... of treating serous effusions. (9)

This engendered a lively exchange of correspondence pointing out that Barr's method was not "new" and challenging his understanding of the physiology involved. The *BMJ* came out on Saturday and a written letter received as late as the next Wednesday, or by telegram up to Thursday morning, could be printed. On six consecutive Saturdays from March 19 to April 23 there were letters on the subject, more than a dozen letters. The editor called a halt, writing "This correspondence should now cease".

In 1907 Barr published a further lecture on pleural effusion in *The Lancet*.(10) A Dr Harry Campbell wrote questioning Barr's understanding on the physical properties of the lung. This resulted in an exchange consisting of four rather tortuous letters from Campbell and as many ripostes from Barr filled with increasing bombast and sarcasm to a total of 10,000 words. Samways tried to mediate, applying his knowledge of physics — he had a first class degree with honours in physics from Cambridge — but Barr, exasperated, complained to the editor that he was "dealing with two *soi-disant* philosophers". Once more an editor closed the correspondence down, writing:

The various parties to this correspondence have had ample space in which to expound their views, and none of them can complain of the undue vigour of their opponents' language, for none of them has failed to reply with equal vigour. As they cannot all have the last word we supply it. This interesting correspondence must now cease.(11)

Trampling of footsteps in all directions in the town square. The more strongly expressed the opinions the less clear must be the evidence. Pleural problems can be very difficult but by the time I had the job of managing them we had a shared vocabulary which these authors lacked. I learned the received physiological model of the forces operating in the visceral and parietal pleura capillaries, the differential solubility of the gases comprising air, and the physical properties of the lung. That was in the 1970s. When I was teaching a class of clinical medical students about the pleura in the late 1990s one who had just achieved his PhD told the class that my knowledge was incomplete. Science had moved on. I handed the marker pen to the young man.

Now we have multiple ways of seeing what is happening inside, there are devices to control fluid drainage, and means to re-expand the lung. If the worst comes to the worst there is endotracheal ventilation to take over breathing. None of these were available in Samways' time. But while technology has changed radically, the human mind has changed little if at all. Human beings are unchanged since my great grandfather's day, the time of Samways.

Theodore Palm, had indeed published a method similar but more controlled than Barr's twenty years earlier while working as a medical missionary in Japan.(12) Incidentally it was Palm who had observed the connection between lack of sunlight and the development of rickets.(13)

Barr had poured scorn on surgeons putting tubes into the chest. A surgeon Graham Simpson, without any rancour, explained precisely how, why, when and where chest tubes could be useful. He concluded his letter:

Finally, I would respectfully suggest to Sir James Barr that little will be accomplished towards the placing of the treatment of this disease "on a scientific basis" by making indiscriminate attacks on surgeons.(14)

Barr would have been undaunted. His biography at the Royal College of Physicians (RCP) states:

A vigorous, pugnacious man ... impervious to criticism and incapable of moderation, Barr was given to voicing his opinion, in no uncertain terms.

Harry Campbell was a gentler man. The RCP biography says this:

Campbell, by his erudition, breadth of outlook and literary gifts, was more suited to an academic life than to the busy world of competitive medicine, in which his lack of assertiveness and his altruism handicapped him severely.

Campbell was one and Samways the other of Barr's "two *soi-disant* philosophers" but they were very different men. Samways was rigorously scientific, recognising illogicality, lack of science and the absence of control data. Around the time of his post mortem room research on the mitral valve Samways diagnosed his own tuberculosis. He was intimately aware of competing claims made for climatic treatments of this disease and wrote:

Neither Switzerland, the Riviera, Egypt, the sea, or an English verandah, can justly claim patent right for the treatment of phthisis. Any of them may be statistically shown to be the best if the cases they treat are selected with sufficient care, and especially if their failures are quietly sent elsewhere.(15)

Samways had settled in Mentone, on the French Riviera where he had recovered. He studied and was examined for a Paris MD so that he could practise in France. Until the winter before he died Dr Samways worked on the Mediterranean Riviera as a general practitioner from November to April, returning to England for the summer. That was apart from during the 1914-18 when he served as a resident doctor in a War Hospital and from there wrote cogently about wound dressings, drainage and antiseptics, optimal splinting of fractures, and anaesthesia for wounded soldiers. His wide experience in general practice, coupled with an aptitude and training in science resulted in a steady flow of letters and articles. Much has changed beyond recognition but through him I found plenty that has resonance today. In 1901 members of the National Antivaccination League waited outside schools distributing leaflets saying:

Parents, do not allow your children to be inspected by the Public Vaccinators. There is no law to compel you. Keep the children away from school rather than run the risk of their being poisoned with filth taken from animals, which the doctors call vaccine, the evil effects of which they themselves do not understand.(16)

My close study of Samways suggests to me that an awareness of history might be good for doctors, even if doctors are not always good at history. I take comfort from Ian Mortimer's essay "What isn't history" — a title which possibly shifts its position depending on where you put the stress — in which he "attempts to transcend [such] critiques by redefining history, relocating it from an exclusively professional domain to a wider public one, and relating it to those who 'enjoy' it (in the widest sense of the word)".(17) But in addition to enjoyment, history is a reminder that however sure we are that we know what we are doing, we should also know that whole swathes of present day practice and beliefs will change in the lifetimes of our medical students. We just don't know what.

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