

## *Viewpoint*

# Is There a History of Scottish Medicine?

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‘Am I working on a history of public health in Scotland or a history of Scottish public health?’ This is a question that I scribbled down over twenty years ago but continues to trouble me. It might seem like a pointless question – some historians use the terms ‘Scottish medicine’ and ‘medicine in Scotland’ interchangeably – but there is a significant difference between the two expressions. ‘Medicine in Scotland’ suggests that Scottish practitioners, along with their counterparts in Europe and North America, worked within shared frameworks of theory and practice (most commonly Western or scientific medicine, but also various forms of heterodox medicine), and just happened to be located in a small, northern nation. A history of Scottish medicine would, while still acknowledging the shared use of ideas, identify what is distinctively different about medicine within the Scottish nation – be it different ideas about disease, or novel therapeutic approaches or distinctive institutional and governmental structures – and why these differences emerged.

Few historians of medicine have tackled the issue of whether medicine in the past was distinctively Scottish. Helen Dingwall *et al.*’s recent and lavishly produced *Scottish Medicine: An Illustrated History* (2011) does not directly address the matter. Instead, the work aims to describe the contribution of Scottish practitioners and institutions to the development of medicine. Aimed at a popular audience, it reflects an old progressive narrative around well-known individuals and the great medical institutions of Edinburgh and Glasgow. The only work that really gets to grips with the question is Helen Dingwall’s earlier volume, *A History of Scottish Medicine: Themes and Influences* (2002), in which she suggests that the social, political and religious context shaped medicine, and interleaves chapters on medical history with accounts of broader historical change. However, as the author admits, it is very difficult to identify what makes medicine distinctively Scottish, especially when dealing with a time span running from the prehistoric to the present day. Lacking comparisons with medicine in other nations, it is hard to judge if her account truly identifies what sets Scottish medicine apart from that elsewhere.

It is hard to disagree with Dingwall’s contention that medicine in the past owes something to the particular Scottish context. Most historians of medicine subscribe to the theory that medicine is an essentially social enterprise, shaped by economic, cultural and political factors which are particular to time and place. Comparing medicine in different countries has been used to tease out how these factors have shaped it. For example, Peter Baldwin’s *Contagion and the*

*State in Europe, 1830–1930*, explores why public health policy developed along different lines in Britain, France, Germany and Sweden. My own work on vaccination in England, Scotland and Ireland was driven by a simple question: why did the British nations end up with different ways of applying a common policy – the compulsory vaccination of infants – using a common medical practice?<sup>1</sup> If medicine is a product of its context, then it would be strange if medicine in Scotland was *not* in some way distinct from that of other nations within Britain and Europe.

This seems like a good time to revisit the question of the Scottishness (or not) of medicine. Since the publication of *A History of Scottish Medicine*, the body of research on the topic has expanded considerably, with historians routinely seeking to set medicine in Scotland into its social and cultural context, and to compare developments in Scottish medicine with those elsewhere. Comparisons to parallel developments in England are used as a benchmark and a means of orienting readers.<sup>2</sup> More importantly, historians have also used studies of medicine in Scotland to enhance our understanding of their chosen topics by exploring the similarities and differences in policy and practice between Scotland and other nations, most often England.

This article uses these works, mainly on the nineteenth and twentieth centuries, to try to define whether and to what extent we can or should think about a distinctively Scottish medicine. I don't pretend to arrive at a definitive answer: I simply hope to encourage readers to think about the issue, especially with reference to their own research. I use a set of rough criteria to distinguish whether medicine can warrant the description 'Scottish' (and these wholly reflect my personal opinion). I assume that distinctively Scottish features can be found in all aspects of medicine – epidemiology, theory, practice, practitioners and institutions. To warrant consideration they have to be significant in some way, lasting for long enough to affect the medical experience of a significant number of the population.

My criteria mean that just because an idea or practice emerged in Scotland, I would not automatically categorise it as Scottish medicine. This rules out many aspects of medicine often proudly touted as Scottish. For example, I would argue that it is impossible to regard Joseph Lister's work on antisepsis as Scottish. While Lister developed his ideas on antisepsis while working in Edinburgh and Glasgow, he was English by birth, educated in London, and his system of surgery was based on ideas of infection that emerged in Germany and France. Lister seems to me to be a practitioner and researcher in Western medicine. Under a

<sup>1</sup> P. Baldwin, *Contagion and the State in Europe, 1830–1930* (Cambridge, 1999); D. Brunton, *The Politics of Vaccination: Practice and Policy in England, Wales, Ireland, and Scotland, 1800–1874* (Rochester, NY, 2008). T. Bonner, *Becoming a Physician: Medical Education in Britain, France, Germany, and the United States, 1750–1945* (Oxford, 1995) uses the same approach to analyse Western medical education.

<sup>2</sup> G. Davis, *'The Cruel Madness of Love': Sex, Syphilis and Psychiatry in Scotland, 1880–1930* (Amsterdam, 2008).

different set of circumstances, he might have devised his system of antiseptic surgery while working in England or Wales or in continental Europe. Similarly, James Young Simpson's discovery of the anaesthetic properties of chloroform has to be defined as Western. Despite Simpson's Scottish identity (he was born, trained and practised in Scotland), his search for a new anaesthetic agent was inspired by the problems associated with the use of ether – an agent introduced from America and adopted in Britain. In a world where Simpson did not exist, some other practitioner in England or Europe or America would probably have stumbled upon the anaesthetic virtues of chloroform. Under my criteria even the status of the teaching at the much-praised medical schools in Edinburgh and Glasgow is not unproblematically Scottish. The cities' university medical schools were undoubtedly different from those at Oxford and Cambridge in their size, the scope and quality of their teaching, and in their openness to students whose religious allegiances lay outside the Anglican Church. However, medical schools in London challenged the Edinburgh and Glasgow schools on all counts: they too were open to all who could pay the fees, and collectively they offered a broad curriculum with sometimes excellent teaching (and even the most partisan supporters of Scottish medical education have to admit that some professors were duds on the teaching front). However, the main reason why I would not characterise the Edinburgh and Glasgow medical schools as distinctively Scottish is that they taught broadly the same curriculum as other schools across Europe. Classes in anatomy, chemistry, medicine, pathology and so on were based on the work of practitioners and researchers across Europe and America.

Having cleared away the people and institutions that fail to meet my criteria of Scottishness, what reaches the required standard? There is no doubt that Scotland's population suffered from a unique pattern of disease incidence. In *Scotland's Health 1919–1948*, Jacqueline Jenkinson lays out Scotland's distinct set of disease problems in the early twentieth century. The population of the heavily urbanised central belt faced health issues associated with industrial labour and poor housing. In the rural north and south, the population also suffered from inadequate living and working conditions. The overall result was that the Scottish population had consistently higher mortality and lower life expectancy than their counterparts elsewhere in Britain. In particular, Scottish people suffered persistently higher rates of tuberculosis infection, and while deaths from the disease declined, in Scotland that decline began later, and mortality fell more slowly. Throughout the Second World War, rates of TB increased in Scotland, whereas in England and Wales they rose only during 1940–41, before resuming their decline. Infant and maternal mortality were also significantly greater than in the rest of the UK.<sup>3</sup> Although the Scottish people suffered from the same diseases as their counterparts in England and Wales, the overall patterns of disease incidence and deaths was different, and policymakers were well aware of the particular health problems faced in Scotland.

<sup>3</sup> J. Jenkinson, *Scotland's Health 1919–1948* (Oxford, 2002).

The local and central government agencies responsible for tackling disease and improving health were also particular to Scotland. From 1845, the Board of Supervision for the Relief of the Poor in Scotland took responsibility for Scottish paupers, including the provision of medical care. It also played a role in public health, overseeing the arrangements for free vaccination against smallpox. In 1894, responsibility for public health was shifted to the Local Government Board within the Scottish Office. Scotland acquired its own Board of Health in 1919. Initially based in Whitehall, in 1928 it relocated to Edinburgh and became the Department of Health for Scotland. In 1939 it became a department within the Scottish Office. Scottish health policy was enshrined in local and national legislation, separate from that passed for England and Wales, which recognised the nation's distinctive legal and government frameworks. At the local level in the early nineteenth century, public health was part of the function of town and city police commissioners, who implemented a range of measures to impose order on urban environments and populations. Later, public health practices were carried out by departments within town, burgh and county councils.

Scottish agencies were never wholly divorced from those in the rest of Britain. The Scottish Poor Law of 1845 was a response to the shortcomings of existing poor relief, which were highlighted by the creation of the New Poor Law in England and Wales in 1834 (the English system also inspired the Irish Poor Law of 1838). The 1845 act introduced the English method of funding relief through local rates instead of voluntary contributions. In the twentieth century, the scope for autonomous actions by the Scottish health department was limited by strict financial control imposed by the Treasury in Whitehall.

Of course, Scottish agencies do not necessarily produce a distinctively different policy and practice, but practice did diverge from that in other parts of Britain. In Scotland, greater responsibility for public health initiatives rested with local authorities than in England. During the crucial middle decades of the nineteenth century, English sanitary reform and public health legislation was driven by central government. In Scotland, individual cities drew up their own police legislation, creating new powers to deal with outbreaks of disease and to improve the salubrity of the urban environment. Although acts were specific to each locality, the content of legislation tended to converge: new bills often copied clauses from existing ones. As a result, Scotland's four main cities led the way in devising programmes of public health, which were then copied by larger towns and in the national police acts (used by communities unable or unwilling to pay for their own legislation). Central government in the form of the Board of Supervision provided only limited oversight of public health activities and certainly no equivalent of Edwin Chadwick's drive for wholesale replacement of water and sewerage infrastructure.<sup>4</sup> Schemes such as Glasgow's massive new water supply from Loch Katrine – which was criticised at the time

<sup>4</sup> C. Hamlin, *Public Health and Social Justice in the Age of Chadwick: Britain, 1800–1854* (Cambridge, 1998).

for oversupplying the city – were the exception rather than the rule. Scottish town authorities adopted a more piecemeal approach, with gradual extension and improvements to paving, drainage, street cleaning, building regulations, the provision of public lavatories and the many other projects aimed to make towns healthier, more comfortable and more pleasant.<sup>5</sup> Ironically, although the drive for better health and urban environment came about through different agencies, the results seem to be similar both north and south of the border. English towns and cities embarked on a similar range of improvements – albeit through a greater number of local government agencies – which, were, like Scottish practices, driven by local need and not the efforts of central government inspectors.<sup>6</sup>

While the demand for a new Scottish Poor Law may have been inspired by that in operation in England and Wales, in practice it was far from a slavish imitation but reflected the existing pattern of work under the Old Poor Law. The 1845 act did not provide relief to the able-bodied, and thus was not shaped by the principle of ‘less-eligibility’ and the desire to deter all but the most desperate from claiming relief in unappealing workhouses. There were large poorhouses in the major Scottish cities, and parishes grouped together to create ‘combination’ poorhouses, but outdoor relief continued to be the major form of support, especially in rural areas. Medical care was provided in the shape of visits at home from a medical officer, although in the Highlands the difficulty of attracting and keeping staff meant that professional help was never guaranteed.<sup>7</sup>

The persistently poor level of medical services in the remote north prompted the creation of a further distinctive Scottish agency: the Highlands and Islands Medical Service (HIMS). The National Insurance Act of 1911 proved unworkable in the Highlands, where crofters were unable to find the regular payments required to guarantee medical care in time of need. The 1912 report of the Dewar Commission pointed to the impact of geography on medical services: few doctors could make a living among such a dispersed population and they had to make long and time-consuming journeys to patients who struggled to pay their fees. The report informed the creation of the HIMS, which supplemented the pay of practitioners in remote areas and provided nurses and hospital staff.<sup>8</sup>

<sup>5</sup> D. Brunton, ‘Regulating Filth: Cleansing in Scottish Towns and Cities, 1840–1880’, *Urban History*, 42, no. 3 (2015), 424–39; idem., ‘Evil Necessaries and Abominable Erections: Public Conveniences and Private Interests in the Scottish City, 1830–1870’, *Social History of Medicine*, 18, no. 2 (2005), 187–202.

<sup>6</sup> Comparison between the public health projects undertaken in England and Scotland is hampered by the lack of local studies of the range and chronology of improvements.

<sup>7</sup> A. Paterson, ‘The Poor Law in Nineteenth-Century Scotland’, in (ed.) D. Fraser, *The New Poor Law in the Nineteenth Century* (London, 1976), 171–93.

<sup>8</sup> P. Whatley, ‘A Full State Medical Service’: The Development of Medical Services in the Highlands and Islands’, in (ed.) E. Cameron and A. Tindley, *Dr Lachlan Grant of Ballachulish, 1871–1945* (Edinburgh, 2015), 23–36.

Other Scottish health agencies embarked on autonomous actions and provided a distinctive design of services. In the twentieth century in the Scottish Board of Health, medical experts had greater influence over policy decisions than their counterparts in the Ministry of Health in Whitehall. Scottish government agencies had their own priorities within policies that were broadly similar to those elsewhere in Britain. In Scotland, greater emphasis was placed on the provision of free and subsidised milk to schoolchildren in an effort to improve their nutritional status and thus boost their ability to study. The Scottish Department of Health also initiated unique studies of nutrition and morbidity.

Cultural attitudes found among the Scottish public and reflected by government agencies also shaped health policy and practice. Roger Davidson and Gayle Davis's *The Sexual State* points to the importance of local government in regulating prostitution, treating venereal disease and prosecuting homosexual acts in post-war Scotland. Most regulation was conducted through local by-laws, with cases prosecuted by local magistrates rather than through central government legislation as in England. In Scotland, fewer cases were prosecuted due to procedural differences. There was a less liberal attitude to sexual behaviour among the Scottish public and the involvement of the churches lent a strong moral slant to debates around sexuality, slowing the emergence of the 'permissive society' of the 1960s. As a result, Scottish government departments were slow to engage in the provision of sex education or to support the passage of legislation tolerating homosexuality.<sup>9</sup>

It is harder to pin down the impact of popular cultural factors in other areas of medicine. Public attitudes towards vaccination against smallpox in late-nineteenth-century Scotland did vary from those in the rest of Britain. Following the introduction of legislation making the practice compulsory in 1863, vaccination rates in Scotland were higher than in England and Wales – around 88 per cent of registered births compared with 79 per cent. This difference was not a result of the threat of legal action against parents who failed to have their infants vaccinated: in England and Wales, the penalties for defaulters were more severe. Organised opposition to compulsion attracted much less greater support in Scotland than in England; indeed it is hard to find evidence of a similar movement. Was the higher level of vaccination the result of a greater public appreciation of the merits of the practice? Or of a culture which was minded to observe laws? Or was it linked to Scotland's unique system of reminders delivered through the local registrar – a more local, face-to-face form of persuasion than the English vaccination officers who sought out defaulters? Clearly there was something going on, but exactly what will require further research.<sup>10</sup>

<sup>9</sup> R. Davidson and G. Davis, *The Sexual State: Sexuality and Scottish Governance, 1950–80* (Edinburgh, 2012).

<sup>10</sup> Brunton, *Politics of Vaccination*; N. Durbach, *Bodily Matters: The Anti-Vaccination Movement in England, 1853–1907* (Durham, NC, 2005).

Similarly, more investigation is required to know if practitioners working in Scotland thought of themselves as a distinct group. It is a difficult problem, as the examples of Simpson and Lister demonstrate. Anne Crowther and Marguerite Dupree's study of Lister's students reminds us that the problems of Scottish identity are not confined to a few individuals. Students from all over the UK (and beyond) came to train in Scotland, and then dispersed around the globe, carrying allegiances to their institutions, their teachers and the ideas acquired during their years of study.<sup>11</sup> And yet, there are hints that the membership of Scottish medical institutions took a different view on professional matters from their counterparts in England. Confronted by a bill to introduce compulsory vaccination, the Edinburgh and Glasgow colleges of physicians and surgeons banded together to lead the opposition to clauses seen to threaten the interests of ordinary practitioners. By contrast, when faced with calls for licensing reform, the London colleges focused on protecting their institutional interests at the expense of rank-and-file practitioners. Lindsay Reid hints that in the twentieth century, Scottish practitioners were more anxious to control midwives than their English counterparts, and Morrice McCrae suggests that there were divisions between GPs in Scotland and the British Medical Association over their conditions of work in the new National Health Service.<sup>12</sup>

It is perhaps not surprising that there is evidence of distinctive cultural attitudes among the Scottish public and medical profession: more intriguing is the thesis that there was something unique about medical ideas held by practitioners. In a series of articles, the American historian of medicine, Chris Hamlin, has argued that a distinction can be made between Scottish public health and that in England not just because it was carried out by different agencies, but because it was rooted in different ways of thinking about disease causation and, ultimately, in social economics.<sup>13</sup> Public health in England was shaped by Edwin Chadwick's vision of the environmental causation of disease. The *Report on the Sanitary Condition of the Labouring Population of Great Britain* (1842) claimed to demonstrate that the poor were sick because they lived in insanitary, overcrowded conditions. Even if they enjoyed a good income and good diet, when surrounded by filth, workers and their families would succumb to disease. The *Sanitary Report* was based on evidence collected in response to questions

<sup>11</sup> M. A. Crowther and M. W. Dupree, *Medical Lives in the Age of Surgical Revolution* (Cambridge, 2007).

<sup>12</sup> L. Reid, *Midwifery in Scotland: A History* (Erskine, 2011); W. Morrice McCrae, *The National Health Service in Scotland: Origins and Ideals, 1900–1950* (East Linton, 2003).

<sup>13</sup> C. Hamlin, 'William Pulteney Alison, the Scottish Philosophy, and the Making of a Political Medicine', *Journal of the History of Medicine and Allied Sciences*, 61, no. 2 (2006), 144–86; idem, 'The "necessaries of life" in British political medicine, 1750–1850', *Journal of Consumer Policy*, 29, no. 4 (2006), 373–97; idem and K. Gallagher-Kamper, 'Malthus and the Doctors: Political Economy, Medicine and the State in England, Ireland, and Scotland, 1800–1840', in (ed.) B. Dolan, *Malthus, Medicine, and Morality: Malthusianism after 1798* (Amsterdam, 2000), 115–40.

about the links between dirt and disease so, not surprisingly, it appeared to prove that filth was the prime cause of ill health. Scottish practitioners, led by William Pulteney Alison who had played a key role in the debates of the 1840s on the need for a new Scottish Poor Law, took a much broader view of disease causation. In their view, disease was spread through contagion. It was most likely to afflict the destitute – those living in poor housing, with inadequate clothing and food, surrounded by dirt and despairing of life – because these conditions left them weak and thus susceptible to disease. Poverty caused debility, which in turn was a predisposing cause of fever. The ultimate means of controlling levels of disease thus lay in political economy – ensuring that the population had access to employment – but in the short term, illness could be prevented through poor relief and through help for the poor in times of epidemics.<sup>14</sup> In successive cholera outbreaks, the Scottish poor received not only medicines to counteract the early symptoms of the disease, but food and clothing. In a footnote, Hamlin sums up the particular character of these ideas:

Partly on grounds of distinctiveness of problems, partly on grounds of the distinctiveness of views of fever, one could defend the designation of a Celtic public medicine in contradistinction to English but also to French and German varieties. Not only was it an outgrowth of the Scottish philosophy of mind and society, but it embodied particularly Celtic problems of the period – of famine, population dislocation, agrarian transformation, and profound cultural conflict.<sup>15</sup>

Although Hamlin proposes that Scottish practitioners embraced a ‘Celtic’ medicine, he also suggests that this thinking about disease causation may have been carried south by Scottish-trained practitioners to influence practice in England.

A distinctive way of thinking about disease was not confined to Alison and his supporters. Christopher Lawrence argued that, in the Enlightenment, Scottish practitioners focused on the role of the nervous system in disease as part of a wider understanding of sensibility – the ability to feel and respond to objects and events – which helped to bind society together. More recently, David Cantor has explored the work of Arthur John Brock, who applied Patrick Geddes’ ideas on the need to integrate the individual with their environment as a root cause and therapy for nervous diseases.<sup>16</sup>

But do distinctive ideas on some aspects of medicine, different agencies and policies, and particular cultural attitudes constitute ‘Scottish medicine’? Of course, it is a personal judgement: whether to emphasise the unique identity

<sup>14</sup> Hamlin, ‘William Pulteney Alison’.

<sup>15</sup> Hamlin, ‘William Pulteney Alison’, 148, n. 9.

<sup>16</sup> C. Lawrence, ‘The nervous system and society in the Scottish Enlightenment’, in (ed.) B. Barnes and S. Shapin, *Natural Order: Historical Studies of Scientific Culture* (London, 1979) 19–40; D. Cantor, ‘Between Galen, Geddes, and the Gael: Arthur Brock, Modernity, and Medical Humanism in Early-Twentieth-Century Scotland’, *Journal of the History of Medicine and Allied Sciences*, 60, no. 1 (2005), 1–41.

of Scottish institutions or the fact that they pursued similar policy goals to agencies elsewhere. Personally, I come down on the side that there is something distinctive about Scottish medicine, but I have no problem with historians who arrive at other conclusions, and I am well aware that evidence from other time periods, or other aspects of medicine, might undermine the notion.

But does it matter? Does it influence how we approach research? Personally, I think it does. A researcher going into archives with the mindset that medicine in Scotland was only part of a wider body of Western medical theory and practice is less likely to make comparisons with medicine elsewhere and hence to look for distinctive features of medicine in Scotland. Another researcher, conscious that there might be something particular about Scottish medicine would, I think, be on the lookout for differences and, perhaps more importantly, for explanations for those particularities. This work would be more in keeping with the developing historiography of the history of medicine, which has seen it shift from a specific subfield to one deeply engaged with other areas of history, and which locates medicine in its cultural, economic, political and social context. So if we are happy to accept that there is a distinctive Scottish history, surely there has to be a Scottish medicine?