

Sir John Simon: A role model for public health practice?

Abstract

This paper describes the environmental, political, and social context in which Sir John Simon, the first medical officer for the City of London and first Medical Officer of Health for England and Wales was positioned and the influence he had on the health of population of the City of London.

The review was undertaken through a review of the literature and the official written work of Sir John Simon specifically the annual “report on the sanitary condition of the City of London” from 1848-49 to 1854-55. This latter material is drawn from primary sources held in original form at the Wellcome Library collection.

The review highlights the pioneering nature of Sir John Simon in seeking to improve the public health in the City of London; his role in recognising housing, drainage, offensive trades as sources of public health risk; and his drive to evidence the efficacy of interventions remain key to environmental and public health practice today.

Key Words

Sir John Simon; Medical Officer of Health; public health, sanitary conditions, City of London

Introduction

Sir Donald Acheson, Sir Kenneth Calman; Sir Liam Donaldson and Professor Dame Sally Davies are names familiar to many reading this, as recent and current Chief Medical Officers of Her Majesty’s Government, Their forebear though is probably less familiar to us. Sir John Simon (1816-1904), pronounced in the French form, was the City of London’s first Medical Officer of Health and the first Chief Medical Officer for England and Wales. Born of French parents, he was brought up in the City of London and was apprenticed as a surgeon at the age of 17 and admitted to the Royal College of Surgeons in 1838 (Lambert 1963).

Before exploring Sir John Simon’s role as a public health pioneer, it is important to set a context in which he worked. Unlike the milieu in which environmental health and public health practitioners now work, the mid-nineteenth century England had no framework for public health, no legislation to tackle the abundant public health issues, nor a clear understanding of the propagation of communicable disease, or a surveillance system to monitor such disease, with the exception in the latter case of cause of death contained in the Bills of Mortality (Szreter 1988). This is a period of endemic smallpox (Hardy 1993), periodic

cholera epidemics, and where the average age of death in the 1830 and 1840s was around 29 in urban areas (Twiss 1845, Daunton 2004).

It is also a period of massive migration and economic growth. In a marked resemblance to the modern world, migrants experienced poorer health due to “residential segregation and low socio-economic status” (Davenport et al 2010). As Szreter (1997, 2001) argues rapid economic growth results in critical social insecurities, change and health issues resultant from disruption. That the overall economy prospers, it is at the expense of the poor and unless there is a rapid state and political response this disruption leads to deprivation, disease and death (Szreter 1999). This migration resulted from urban pull and the increasing population size in the UK resulting from increased fertility (Wrigley and Schofield 1983, Wrigley 1985), a result of earlier marriage and reduced mortality which had been evident throughout the 18th century. However the period 1830 – 1870 saw this reduced mortality stagnate through evidenced decline in sanitary conditions.

The high incidence of communicable disease and net migration required systematic changes in public health behaviours and sanitation (Armstrong 1993). As Armstrong (ibid) highlights the period leading up to the reforms instigated by the EH pioneers was dominated by “cordon sanitaire” in which quarantine was utilised to segregated the sick from the healthy using spatial separation which often remained even once the sick moved on, died or recovered.

Alongside the above it has be noted that this was also a period in which liberal politics were a dominant force. Legislative interventions such as the Vaccination Act (1853) and the Contagious Diseases Act 1864 (Porter and Porter, 1988) provoked huge controversy through the compulsion of vaccination, something that has returned to trouble many in society today (Kennedy et al, 2005, Bean, 2011). The term liberal though is used with some caution. It is not used in the context of non-state intervention or laissez faire but instead used in the context of advocacy of progressive reform and as Crook (2007) argues the desire for a moralised and health society capable of self-governance through guidance and rules.

Methods

Materials were initially sourced using both Middlesex University’s proprietary search engine Summon and Google Scholar, using search terms “Sir John Simon” and “John Simon, Medical Officer of Health” to determine key texts and authors. This information was used to provide a time-lined biography from birth, education, employment, output and impact. In addition review of primary artefacts in the form of his authored reports and personal recollections, both of which are held at the welcome library in digitalised form, was undertaken.

Legacy

It is into the parlous public health context that Sir John Simon a renowned surgeon; researcher and the first lecturer in pathology in the UK (Lambert 1963) journeyed. Coming from a “socially prominent family” and embedded as a surgeon, Simon was seen as uncontroversial an appointment to the role of Medical Officer of Health for the City of London (UCLA undated) and indeed a committee was formed to support his appointment (ibid). To this role, however, he applied his skills as a scientist insisting on having evidence before suggesting reasons or solutions. His first annual report of 1849 set the tone of his subsequent work, embedded with detailed analysis of mortality rates and evaluation of the causation. A staunch advocate of the links between poor housing and poor health he advocated slum clearance, building of hygienic (model) housing, control of water supplies including the provision of public wash houses, controls over burials, and restrictions over offensive trades such as bone boiling, leather making, animal hide sales (Crook 2007) (see figure 1 below)

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Figure 1: Simon, J (1849) Report on the sanitary condition of the City of London for the year 1848-9 pp 1

This report seen as controversial, with the aldermen of the City accusing him of gross exaggeration (Lambert 1963). However the facts were clear, the City of London had a mortality rate of 30 deaths per 1000 population a figure as Simon (1848) highlighted was nearly three times the worst suburban district rate of 11 deaths per 1000 population evidenced by the Registrar General’s Reports of the same period. At that time it was all too easy to blame epidemics of cholera for high mortality levels, however Simon turned his attention not to the presence of cholera but to the conditions that lead to its incidence and prevalence and arguably to a movement towards preventative interventions.

Such is the general rule; and accordingly I would suggest to you that the presence of epidemic cholera, instead of serving to explain away the local inequalities of mortality, does, in fact, only constitute a most important additional testimony to the salubrity or insalubrity of a district, and renders more evident a disparity of circumstances which was previously decided. The frightful phenomenon of a periodic pestilence belongs only to defective sanitary arrangements; and, in

Figure 2 : Simon, J (1849) Report on the sanitary condition of the City of London for the year 1848-9 pp 7

Likewise he explored, in great detail, the differing mortality rates within the districts of the City of London to highlight that the aggregated high mortality rate for the City was skewed significantly by a number of districts and thus action should be focused rather than generally applied.

These facts are quite unquestionable, and I have felt it my duty to bring them under your notice as pointedly and impressively as I can; feeling assured, as I do, that so soon as you are cognizant of them, every motive of humanity, no less than of economical prudence, must engage you to investigate with me, whether or not there may lie within your reach any adoptable measures for lessening this large expenditure of human life, and for relieving its attendant misery. It is, therefore, with the deepest feeling of responsibility that I proceed to fulfil the main object of my First Annual Report, by tracing these effects to their causes, and by explaining to you, from a year's observation and experience, what seem to me the chief influences prevailing against life within the City of London.

Figure 3 : Simon, J (1849) Report on the sanitary condition of the City of London for the year 1848-9 pp 10

The foundation of his argument may not always have been correct, relying on miasma as the causative agent: "These gases, which so many thousands of persons are daily inhaling,.... rise from so many cesspools, and taint the atmosphere of so many houses, they form a climate the most congenial for the multiplication of epidemic disorders," (Simon 1849 page 13) but his recognition that by removing the source of harm public health could be improved

was a significant shift in thought. At that time many in society saw poverty as a result of indolence and thus the poor were deserving of their predicament. These were the advocates of the workhouse in which conditions were deliberately poor so as to discourage dependency on the state or parish (de Pennington 2011). The others such as Simon were social reformers, suggesting that it was circumstances beyond their control that led the poor to poor health. That this debate remains current (Chapman 2012) and that it is a former Archbishop of Canterbury that was embroiled in the debate shows how Simon stood out in his advocacy for sanitary improvement.

The report also highlighted the importance of water supply, both in terms of quality but also quantity. As his reports highlights “that its unrestricted supply is the first essential of decency, of comfort, and of health; that no civilization of the poorer classes can exist without it; and that any limitation to its use in the metropolis is a barrier, which must maintain thousands in a state of the most unwholesome filth and degradation.” (Simon 1849 pp 22). At this time a communal well, cistern or butt would be common and even where water was supplied to houses directly “the water is turned on only for a few hours in a week” (Simon 1849 pp 23) requiring storage of water for prolonged periods subjecting it to potential contamination “receiving soot and all other impurities from the air, absorbing stench from the adjacent cesspool; inviting filth from insects, vermin, sparrows, cats and children....and every hour becoming fustier and more offensive” (Simon *ibid*).

His recommendations were bold suggesting potable water to all households and not just houses, thus including tenements and lodging house, the forebear of the modern House in Multiple Occupation. He also suggested that privies should be directly supplied with water to enable flushing and cleansing of the discharge pipe. On offensive trades he called for all slaughtering of animals in the City of London to be banned. At the time there were 138 slaughterhouses of which 58 were in “vaults and cellars” (Simon *ibid* pp 32). He was also a pioneer in managing “nuisance” trades such as tallow melting suggesting that it is a common right to breathe an uncontaminated atmosphere, again something that has returned to haunt those living in London. His use of terms common to those within environmental health in relation such nuisances underpin today’s practice, for example “It might be an infraction of personal liberty, to interfere with a proprietor's right to make offensive smells within the limits of his own tenement, and for his own separate inhalation; but surely it is a still greater infraction of personal liberty when the proprietor, entitled as he is to but the joint use of an atmosphere, which is the common property of his neighbourhood” (Simon *ibid* pp 34). Likewise he focused attention on smoke nuisance both detrimental to health and wellbeing but also from the perspective of “wasted fuel” thus linking both environmental degradation and health.

His 1850 report is more politically crafted. The data set on which he reports showed a notable reduction in the mortality rate which placed his advocacy of future intervention on difficult ground. He applauds the work of the committee to whom he reported but continues his activism for the removal of “evils” such as overcrowding, defective drainage, contamination of water supplies pointing to the limited data sets over the 2 years of his incumbency. There are marked differences in the report style from his 1849 report, becoming distinctly more evidence based.

In the Years terminating as follows:—	Fever &c.	Cholera, Dysentery Epidemic Diarrhoea	Scarlet Fever Cynanche Maligna, &c.	Small Pox, &c.	Erysipelas Puerperal Fever, Phlebitis, &c.	Diarrhoea, Bronchitis and Pneumonia of infants, under 3 years of age.	Zymotic Disorders commonly occurring in Infants: Hooping-cough, Croup, Measles.	Hydrocephalus and Convulsions of Infancy.	Total.
At Michaelmas 1849	166	825	135	17	44	285	196	264	1932
„ 1850	118	54	32	33	40	243	124	219	863
„ 1851	107	23	46	41	17	340	272	282	1128
Total of three years	391	902	213	91	101	868	592	765	3923

Figure 4: No. V. Comparative prevalence during the Three years 1848-9, 1849-50 and 1850-1 of such Deaths from acute disease as may chiefly be considered preventable. (Simon 1850)

By 1853 his data sets were able to demonstrate some form of trend, although as he rightly points to, the absence of data prior to the interventions made for difficult interpretation of efficacy or effect. This is something that modern environmental health practitioner may well reflect upon, as without a base line datum it is nigh on impossible to so the effectiveness of any given intervention. That he saw this some 160 years ago shows the enlightened worldview that he offered public health. What he also began to extol was the notion of multiple causality exploring urban planning, drainage, population density, relative height of occupied ground compared to the nearest water surface (Simon 1853 pp 20).

As Lambert (1963) highlights he faced considerable opposition to his interventions but was aided by the ever present cholera epidemic which led to an increasing mortality rate which Simon used to demonstrate the necessity of change.

Implications for contemporary policy or practice

His work was, authoritative, evidenced and detailed and was recognised by prominent medical practitioners such as Charles Witt who in a letter to Simon in 1859 records his “humble tribute of thanks for your unwearied labours as a guardian of public health” (Witt 1859 pp 1). There are lessons for environmental health and wider public health practitioners that practice must be evidence based but of equal importance is the need for the voice of the practitioner to be heard and acted upon. The former is something that practitioners can act upon, but the latter requires an additional skill set of political awareness and in this case tenacity to seek sustained change.

Such was his effect that he then was promoted to medical officer for the General Board of Health (GBH), the first national role, showing at that time that his voice indeed was being heard and the efficacy of his actions recognised. That said the role did not last long as the GBH was abolished, a point at which many practitioners navigating the complexity of power would falter. Instead Simon’s role was transferred to the Privy Council a position of substantial power which enabled him to ensure his views were embodied in legislation. Seymour 2007 points to the more contested and complex arena in which health policy is now framed between the Chief Medical Officer, Permanent Secretary and Minister and where the tensions between meeting the needs of government, the nation’s health and the medical profession are highly charged.

In a remarkably rehearsal of the modern era he was constantly challenged by arguments surrounding central government and localism with LA advocates such as Chadwick strong opponents. Likewise whilst managing to enshrine his public health message within legislation, on occasions his interventions were undermined by changes in political position with legislation watered down by subsequent administrations (Lambert 1963) and by 1871 he had lost his access to parliament becoming an advisor rather than an executive agent of government. Finally again in a remarkable echo of the future on his retirement the appointment within the privy council was abolished and the role of medical officer to the Local Government Board downgraded in both salary and prestige much as has happened within public health today.

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