

Articoli/Articles

CHANGES IN THE MEDICAL PROFESSION IN GREAT  
BRITAIN IN THE XIX CENTURY

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SUMMARY

*The nineteenth century was important for medicine in Britain because the foundations of a united medical profession were laid by the Medical Act of 1858. This established the General Medical Council which had the responsibility of maintaining a list of qualified medical practitioners. This not only protected the public from unknowingly using unqualified medical practitioners, but also created a monopoly of medical practice which was protected by law. In the second half of the century, women started to qualify and be registered. The century also saw the development of effective anaesthetics and the idea that the health of the public could be preserved by legislation. The notion of prevention was born, even though after a further one hundred years, the profession is still dominated by the idea that its responsibility is to cure.*

*Introduction*

Until the end of the seventeenth century and the early years of the eighteenth century, there were few important changes in the professional practice of medicine in England. The main philosophy of medical treatment was based on the assumption that the healthy human body is a fine balance between the four com-

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ponents: earth, air, fire and water, and the main objective of medical treatment was to restore the balance when it had become disturbed. The care and treatment of the sick was, for the major part, the responsibility of three distinct groups of specialists, the physicians, the barber surgeons and the apothecaries who often would have been self taught with little or no formal medical education, and they competed for patients in the *market place* of sickness in the same way that other tradesmen competed for business.

The physicians were the most *professional*; they would have had a formal schooling, followed a standard educational programme including university where they would have studied philosophy more profoundly than medicine; they were *gentlemen* who claimed that they worked with their brains rather than with their hands; for them the manual work of surgery was beneath their dignity, and they regarded midwifery as even more degrading. They tended to practice in the large cities concentrating on the needs of the wealthy without making any major impact on the health needs of the masses or society as a whole. Their diagnoses were usually based on an examination of the body and a sample of urine.

In contrast, a barber surgeon did far more than just cut hair! Since pre-Roman times the surgeon was also the barber and his almost universal panacea was bloodletting. He was a self-taught craftsman who, although he generally knew little about medicine, performed not only surgical procedures (without the use of anaesthetics) including dentistry, but also often kept a shop, dispensed drugs and may also have practised midwifery.

The apothecaries, being manual workers also involved in trade, were perhaps the least respected of the three groups. They were tradesmen who had to serve an apprenticeship and were allowed to charge only for the sale of drugs that were prescribed by physicians. Outside the main cities, however, they were treating the sick, prescribing drugs and, for the major part of the community, they had become the usual point of reference for medical advice and treatment.

In the eighteenth century, the idea of medical care became more diffused and the work of the doctor started its long evolu-

tion towards the medical profession that exists now. In this century, many voluntary hospitals were founded, in which the main objective was to cure the patient rather than simply to relieve symptoms and offer hospitality, as was the case in the hospices of old which were almost totally under the control of the church. The new hospitals were to play an increasingly important role in providing health care, particularly in urban areas, and from the second half of the eighteenth century they became important centres of clinical medical education. In spite of the attempts of the College of Physicians, which maintained that its members were a social elite in the profession of medicine, and the Company of Surgeons (founded in 1745 with the intention to abandon trade connections and confine its members to the practice of surgery only, a theme continued by the Royal College of Surgeons in 1800) to maintain the tripartite division within the profession, the delineation between the physicians, surgeons and apothecaries progressively became less well defined in the daily practice of medicine and in the competition for fee paying patients. It became even more common for apothecaries to perform minor surgery, and surgeons to prescribe drugs etc. It became important for the doctor to be attached to a hospital and this led to a new division between those who had a hospital appointment and those who did not, based on occupation rather than social status. These hospitals became an important part of the provision of medical care and the social and professional status of the surgeon improved and even apothecaries started to work in the hospitals.

After a university education the title *Doctor* was conferred on the successful graduate physician and this title was originally intended to imply a qualification to teach. The surgeons, who learned their skills outside the universities, used the title *Mister*, a habit that remains even today when surgeons, who may now-a-days consider themselves to be an elite in the medical profession, often retain, as a curious form of inverse snobbery, the title *Mister* rather than *Doctor*!

#### *The nineteenth century*

While it is true that the nineteenth century saw advances in medical education, basic medical science and public health, the

century did not start very happily in terms of the public image of the medical professions. The country was rocked by health scandals, such as those which arose from the supply of corpses for teaching anatomy; Parliamentary Committees revealed and publicised the inhuman treatment of the inmates in both public and private mad-houses; the Chadwick Report, *Sanitary Conditions of the Labouring populations of Great Britain*, published in 1842 by Edwin Chadwick (1800-1890), described the squalid living conditions in the slums of English mill towns and demonstrated that the *working class* suffered disproportionately from disease; in Ireland, whose population was 10 million, there was a famine which by 1851 had caused one million people to die of starvation and another 1.5 million to emigrate; epidemics, such as the influenza epidemic of London in 1847, which killed 15000 people, and the Cholera epidemic of Soho, in 1854, were common.

The dissection of corpses for the teaching of anatomy and surgery, in particular, caught the public's attention. In the eighteenth century and the first half of the nineteenth, all medical education was conducted privately. Students paid to attend the lectures on anatomy and surgery given by consultants in hospitals and they paid high fees to become apprenticed to consultant surgeons in hospitals. There was a huge demand for human corpses for the teaching of anatomy that the traditional source, the bodies of convicted and hanged murderers, was unable to supply. On average in London, in 1843, 1.3 corpses were supplied to each first-year student, whereas now-a-days the figure is 0.2<sup>1</sup>. Increasingly, the demand for fresh corpses for dissection was met by *body-snatchers* who stole by night bodies which had been interred during the day. The thought that a post-mortem punishment for murderers should be inflicted by the medical profession on the innocent dead, the repugnance of the public towards the body-snatchers, and the cultural fear of mutilation of the dead by dissection, led to public outrage. Watchmen were employed to guard cemeteries and it became more difficult for the body-snatchers to satisfy the demands of the anatomists for freshly dead bodies. In order to maintain the raw materials of their lucrative business, the body-snatchers sought and found an

alternative source of bodies by luring the poor and lonely to places where they could be murdered by strangling or smothering, after which, the bodies would be taken fresh and still warm to the anatomy schools. The schools would pay a high price, and few questions would be asked about the source of the body. The body would be dismembered and the parts sold to students at a considerable profit<sup>2</sup>. The fact that the bodies were obtained by murdering innocent destitute people did not concern the avaricious teachers of anatomy. The *industry* of selling the bodies of murder victims to medical schools led to the investigation of the notorious body-snatchers and murderers Burke and Hare, which resulted in Burke's conviction for the murder of 16 persons whose bodies were sold to Dr Robert Knox's anatomy school in Edinburgh. Burke was hanged on 28 January 1829 and publicly dissected the day after. His accomplice, Hare was freed after providing the evidence which convicted Burke, and the notorious Dr Knox was never brought to trial, despite the public outrage against him and the anatomy schools<sup>3</sup>, and the fact that, since 1828, anatomists had been convicted. The trial of Burke and the reaction of the public against body-snatchers, *Burkers* and the members of the medical profession who were involved in dissection, contributed to the passing in 1832 of the *Anatomy Act*. Richardson<sup>4</sup> observes:

*This Act recommended that, instead of giving hanged murderers, the government should confiscate the bodies of paupers dying in workhouses and hospitals, too poor to pay for their own funerals. What had for generations been a feared and hated punishment for murder became one for poverty.*

Some doctors argued that it was degrading that, through dissection, the medical profession should be associated with the punishment of criminals, but it is difficult to understand how the use of the defenseless poor could be considered more dignified.

From the end of the eighteenth century, medical organisations and societies, the demands of a growing middle class for *family medicine* and the need for reform led to more state involvement in the practice of medicine. The revelations of scan-

dals, for example the mal-treatment of the inmates of mad houses, gradually provoked a public response, which in this case, eventually resulted in the Acts of 1808 and 1845 which set up a national system of lunatic asylums, and the Acts of 1828 and 1844 which appointed inspectors who had the responsibility to eradicate the ill treatment of the insane. The Crimea War brought Florence Nightingale to prominence, and her experiences led to the reform of military medical services, and after her return to England, to the reform of the Nursing profession. More directly related to the control of the medical profession, the Association of Apothecaries and Surgeon Apothecaries brought pressure to bear on the government to pass the Apothecaries Act of 1815. After this Act, no-one could legally become an apothecary without a license. On the face of it, this Act gave the public a degree of protection against those who were unqualified and, indeed, one consequence of the Act was to curb the rising number of druggists and herbalists of the latter half of the eighteenth century, who offered their services at lower prices than the new license holders. On the other hand, it conferred a degree of respectability on the apothecaries' profession and thus encouraged an increasing number of surgeons to obtain the Apothecaries' diploma, and these became a major part of the growing new professional group of general practitioners.

However, the most important single event in the nineteenth century which affected the medical profession was the passing of the Medical Act of 1858. In the early part of the nineteenth century, while the terms: physician, surgeon and apothecary remained common, and the Councils of the Colleges of Physicians and Surgeons (which represented only the *pure* physicians and surgeons) and the Association of Apothecaries maintained their tight political control over their respective sectors of the profession, the number of doctors who practiced in just one of these sectors became relatively small. In 1834, there were about 6000 members of the Royal College of Surgeons in England and Wales but only about 200 confined their professional activity to surgery, whilst the rest were general practitioners<sup>5</sup>. These general practitioners may have held a university degree in medicine, a diploma from the College of Surgeons, a license from the As-

sociation of Apothecaries or any combination of these<sup>6</sup>, but they had no representation on the councils of Royal Colleges. Instead of three categories based on social status, a new division had developed in the profession which was based on the occupational role of the doctors. The large majority were the general practitioners who served the basic health needs of the people, and the minority were the specialist consultants who held hospital appointments. The need for a large number of general practitioners had arisen because the industrial revolution had produced a steadily growing middle class that could not afford to pay the fees traditionally charged by *gentlemen* physicians and surgeons but demanded the form of general family medical care that could be provided by a general practitioner. Also one general practitioner was cheaper than three specialists!

However, in the first half of the nineteenth century there was a growing hostility between the consultants, who were members of the councils of the Royal Colleges, and the growing number of general practitioners. The general practitioners had been waging a long campaign for the reform of the profession that would give them the recognition they believed they deserved, given that it was they who provided the major contribution to the health needs of the people. In particular, they wanted reform of the Royal Colleges, in which they were the majority of members but over which they had no democratic control. Ordinary members of the Royal College of Surgeons had no vote to elect the Council, which perpetuated itself by it co-opting new members. The general practitioners also wanted reform of medical education, which was totally controlled by the Councils of the Royal Colleges, on which they were not represented. In contrast, the consultants wanted to preserve their own interests. Even though their income derived from treating patients in the hospitals was not excessive, they earned much more from teaching (students paid substantial fees to attend lectures) and surgeons at the larger London hospitals received very high fees from apprentices. In addition, as a result of the prestige conferred upon the consultants by their hospital appointments, they were able to command very high fees from the wealthy patients they treated on the basis of private practice. The distinguished consultant,

Sir Astley Cooper, had an annual income in excess of £15000 and in 1815 he earned £21000<sup>7</sup>, although incomes for consultants were more commonly in the range £8000 to £10000, which in any case, enabled them to live in the gentlemanly style to which they had become accustomed. In contrast, many general practitioners especially those with practices in the poorer areas of the large industrial towns and in the early years of their careers, had difficulty in making a living. In 1858 it was estimated that one in nine general practitioners died leaving less than £100, and indeed, the Society for the Relief of Widows and Orphans of Medical Men, reported that in the early 1840s one in four of the members of the Society had left a widow or orphan claimants on its funds. The number of general practitioners had increased substantially, and by 1850 the Universities of Edinburgh, Glasgow, Aberdeen, Oxford, Cambridge and London were producing hundreds of new medical graduates per year, and the number increased even further as medical schools opened in other major cities of the United Kingdom. General practitioners found that they had to compete with each other on price to win patients, and having treated them, they often had difficulty in obtaining their fees. Porter<sup>8</sup> cites the case of

*Mr Wagstaffe of St Mary's Lambeth who in 1836 claimed: to have seen 6000 cases of illness, made 20000 visits, and sent out 10000 mixtures, 12000 powders and 30000 pills - and all on a salary of £105 a year! Many received far less.*

The need for the reform of the profession was clear to all except the Councils of the Royal Colleges, and the campaign grew stronger from 1820 onwards. In 1823 the surgeon Thomas Wakley founded a radical medical journal, the *Lancet*, which he used to attack the Councils. Porter<sup>9</sup> comments:

*Wakley shot deadly blasts at all the medical corporations, accusing them of neglecting their duties even as they abused their powers. London hospitals were nests of nepotism, one consequence of which was that the sick suffered neglect, mistreatment and hamfisted surgery. No wonder, argued the Lancet, people patronised the equally awful sharks and swindlers whose careers as quacks ought to have been terminated by decisive*

*Collegiate action. In the midst of this ocean of corruption, only the honest surgeon-apothecary, that is, the emergent general practitioner, upheld the standards of true medicine; and for his pains, he could hardly make a decent living.*

Nepotism in hospitals may seem extraordinary today, but in 1828, Wakley revealed that Sir Astley Cooper had five relatives holding key positions in St Thomas' and Guy's hospitals in London and that their annual income obtained from students was £5000<sup>10</sup>.

At first sight the consequences of the Act do not seem much. The General Medical Council (GMC) was established which had two main responsibilities: the Council had to create and maintain a register of all doctors who possessed recognised qualifications, and it had to delete from the list doctors who, by neglect, inability or misconduct, did not maintain the dignity of the profession. By maintaining a list of qualified practitioners of medicine the public could be protected from the charlatans. However, the Act only made it an offence to pretend to be a qualified or registered practitioner, but the practice of medicine by doctors without approved qualifications was not made illegal, and *fringe* medicine, which tended to be cheaper than that offered by the doctors on the new register, continued. However, the Act did create a monopoly for registered practitioners in all public institutions. Thus only registered doctors were able to be employed in the army, navy, any Hospital, Infirmary, Dispensary or Lying-in Hospital not supported wholly by voluntary contributions ...any Lunatic Asylum, Gaol, Penitentiary, ...Parochial or Union Workhouse or Poorhouse, Parish Union or other public Establishment... any Friendly Society... or as a Medical Officer of Health. This concession to registered medical practitioners was important because the second half of the nineteenth century saw an extensive expansion of these public health services and assured them of a large number of tenured appointments. As Waddington<sup>11</sup> observes,

*... in giving a legal definition to the term qualified medical practitioner and in drawing a sharp differentiation between those practitioners who were qualified and therefore entitled to register under the Act, and those*

*who were not, the Act clearly established the legal and other institutional boundaries of the regular medical profession .... and thus brought into being a medical profession for the United Kingdom.*

What the Medical Act 1858 did not do, was to give the general practitioners any legal body to represent their views, and it did not give them representation on the new GMC. They had been successful only in so far as the Act provided for the common registration of all practitioners without reference to the specialities of physicians, surgeons and apothecaries. They had to wait another twenty-eight years until the Medical Act of 1886 required that all practitioners of medicine had to be qualified in medicine, surgery and midwifery, thus creating the so-called *safe general practitioner*. The same Act ensured that all members of the profession would be represented on the General Medical Council.

However, even the Medical Acts of 1858 and 1886 did not resolve all the problems of the relationships between the medical profession and the people it served. Stacey<sup>12</sup> observes that

*the 1858 Act proved crucial for the establishment of medicine as a profession ... It led to the development of a selfconscious occupation aiming for control of the work situation and client, controlling its own labour supply and its own remuneration.*

But this has implications not faced by the profession previously. Whereas the individual doctor was (and is) directly responsible to his individual patient, the creation of the GMC made the profession corporately responsible, not only for its own affairs, but also to the state. In fact, the GMC is independent, self-financing and constitutionally directly responsible only to the Privy Council. Gladstone<sup>13</sup> observes that even today, the issue of the accountability of the profession by the GMC is underlined by its composition: of 102 members only 9 are not medically qualified and they are Members of Parliament, Justices of the Peace, lawyers and two non-medical academics. Certainly, if the whole of the medical profession is now represented by the GMC, it is clear that the population that the profession serves is not so well represented.

### *Women doctors*

Apart from the clergy and politics, there cannot be many professions which have been more reluctant to acknowledge the possible contribution of women, than the medical profession. Until the middle of the nineteenth century it was unthinkable as well as virtually impossible for a woman to become a doctor.

The story of the first British female doctor, Dr James Barry, is so fantastic, that it would be unbelievable were it not so well researched and documented. In brief, (the full and fascinating account of the life of Dr James Barry is described by Hurwitz and Richardson<sup>14</sup>), the story is that Dr Barry was born 25/7/1795<sup>15</sup> and although her parentage is unknown, she was probably the niece of the noted artist James Barry RA. In order to enter Edinburgh University Medical School she dressed and took the role of a man and adopted the name of her uncle. The secret of her true gender was discovered only after her death in 1865. She graduated from Edinburgh at the age of 17 in 1812 and worked under Sir Astley Cooper in St Thomas' and Guy's hospitals in London where she was examined and passed as a regimental Surgeon by the Royal College of Surgeons in 1813. Her army career was highly successful: she was rapidly promoted and achieved the final rank of Inspector General of Hospitals in the British army. She served in South Africa, where in 1826 she performed one of the first Caesarian sections in which both the mother and baby survived, and in Malta where she was personally thanked by the Duke of Wellington for her work during the cholera outbreak in 1846. In Corfu in 1855, she supervised the treatment of 500 casualties from the Crimea war and later went to the Crimea where she met Florence Nightingale. The two women did not get on well together and when, at Nightingale's instigation, Sir John Hall, the Director General of Hospitals was replaced by Sir Thomas Alexander, Dr Barry was promoted to Inspector General of Hospitals and sent to Canada to take the post relinquished by Alexander. She returned to London in 1859 in poor health and declared unfit for further service. Although she petitioned the Secretary of State for War, she was retired in July 1859. She died in Marylebone, London in 1865 and was laid out by a local nurse who discovered her se-

cret. Rumours about lovers and a drunken husband abounded after her death. It is even claimed that she was the mother of at least one child<sup>16</sup> which seems implausible given that Barry was on active service in the army for all the years of age when she would have been physiologically capable of having a child. For a woman to disguise her true sex for over half a century, and to follow an outstanding career in the British Army is a remarkable feat. To have followed a medical career in which she earned a reputation as a skillful surgeon and compassionate reformer at the same time is incredible!

The first woman to be registered in Britain as a medical practitioner (without disguising her gender) was Elizabeth Blackwell (1821-1910) who was registered in 1859 on the basis of medical qualifications she obtained in America and that the fact that she was already in practice before the register was created. It is possible that the decision by the GMC, one year later, that the holders of foreign qualifications would not be allowed to practice medicine in England, was a direct consequence of this<sup>17</sup>. Elizabeth Blackwell was born in Bristol and from an early age made the decision to try to become a doctor. After a fire destroyed her father's business, the family emigrated to America in 1832. To earn and save money while she waited to enter medical school she obtained a post as a teacher in a music school in North Carolina. Because none of the well known medical schools would accept her, she applied to smaller country schools and was accepted by the Geneva Medical College (now known as the Hobart and William Smith Colleges) in Syracuse, NY, in 1847 and graduated in 1849. Wanting to specialise in women's health, she tried to attend lectures at L'École de Medecine in Paris, but was refused admission and instead followed a training in midwifery for nurses at La Maternité. After Paris, she returned to England in 1850 and obtained a position at St. Bartholomew's Hospital. She met and became friends with Florence Nightingale from whom she learned about the importance of hygiene and sanitation. She returned to New York where she met much prejudice against her medical practice but with the help of the Quaker Movement she established a free dispensary which led in 1857 to the foundation, with her sister Emily (1826-1910), newly

qualified in surgery from the same college as her sister, and Marie Zakrewska, of the New York Infirmary for Women and Children. She returned to England, established the National Health Society of London with the slogan *prevention is better than cure* (a slogan that many doctors and health planners today do not seem to understand) and founded the London School of Medicine for Women in 1875. She died in Hastings in 1910.

The first woman to be trained in Britain and registered was Elizabeth Garrett, later Elizabeth Garrett Anderson (1836-1917). She was refused entry to every medical school in England and Scotland, but was included on the Medical Register as a result of her qualifying as a Licentiate of the Worshipful Society of Apothecaries of London in 1865<sup>18</sup>. The old guild regulations of the Association of Apothecaries did not explicitly exclude women, but immediately after Elizabeth Garrett's success the regulations were changed<sup>19</sup>. In 1870 she obtained her MD in Paris and became Dean of what is now the Royal Free Hospital School of Medicine. Elizabeth Garrett opened the St Marylabone Dispensary for Women and Children in 1866 (which eventually became the Elizabeth Garrett Anderson Hospital). Between 1866 and 1929, thirteen hospitals were founded and staffed by British women doctors in the UK but the Elizabeth Garrett Anderson Hospital is the only one that remains in its own right<sup>20</sup>. Elizabeth Garrett also played an important part in the Women's Suffragette Movement with her younger sister Millicent Garrett Fawcett, who later became the leader of the movement, and Florence Nightingale. In 1866 nearly 1500 eminent women signed a petition for the vote, which was presented to the House of Commons where 80 members voted in favour of women's suffrage<sup>21</sup>.

Other early female pioneer doctors faced similar difficulties when they tried to qualify and obtain registration. In 1873, the University of Edinburgh won a lawsuit which permitted them to refuse to award women their medical degrees. The cause of the lawsuit was Sofia Jex-Blake (1840 -1912), who continued her campaign in 1875 by seeking to have women included on the register through the midwifery license, which caused the whole board of midwifery examiners to resign in protest<sup>22</sup>.

Very gradually, more women were able to qualify and register, but by the outbreak of the First World War, there were only about 500 registered female doctors, slightly less than Germany and France but much fewer than Russia<sup>23</sup>. About one hundred years later number of male and female entrants in British medical schools was about equal, but it is claimed that even now, there may be discrimination against women in the filling of important career posts<sup>24</sup>.

*Developments in treatment and prevention.*

There were many developments in basic medical science which contributed to the change in the practice of medicine in the nineteenth century, but perhaps the biggest single advance, especially but not only in the practice of surgery, was the control of pain.

From time immemorial, potions have been claimed to have anaesthetic properties, but the first *modern* anaesthetic was ether, which was discovered by Charles Jackson (1805 - 1880) in 1842. Its use was first publicly demonstrated by William Morton at Massachusetts General Hospital in 1846. In 1844 nitrous oxide was first used as an anaesthetic by Horace Wells (1815-1843). In Britain, the development of anaesthetics was pioneered by the Edinburgh obstetric surgeon, Sir James Simpson (1811-1870), who, encouraged by Morton's success, started experimenting upon himself with vapours including acetone, nitric ether, benzin, iodoform and aldehyde, which he thought might have the same effect as ether. In 1847, at the suggestion of a local chemist in Liverpool, David Waldie, he tried *perchloride of formyle* as chloroform was then known, which worked better than nitrous oxide or ether<sup>25</sup>. He began using chloroform for childbirth in 1874, and five years later John Snow (1813-1858), the first British physician to practice full time as an anaesthetist, administered it to Queen Victoria at the birth of her eighth child. She is reported to have said<sup>26</sup> *the doctor gave that blessed chloroform and the effect was soothing, quieting and delightful beyond measure*. The use of anaesthetics and the proof of the efficacy of asepsis in 1865 by Joseph Lister (1827-1912), Professor of Surgery at Glasgow

University, led to dramatic reductions in mortality from major surgery in the later decades of the nineteenth century.

The nineteenth century saw the start of what is now called public health medicine; that is the application of health measures to a population, the individuals of which may neither ask for nor want the intervention. The introduction of measures to control the health of the British population, together with a rise in the general standard of living, achieved massive reductions in the crude death rate and particularly mortality from infectious disease<sup>27</sup>. The main legislation that helped to achieved this was the New Poor Law of 1834 which not only formalised the *work house* system to cater for the needs of the poor, but also established workhouse infirmaries, often with isolation wards. As Porter<sup>28</sup> notes, a national health system was established for the poor one hundred years before it was provided for the population as a whole. The General Registry Office was established in 1837 and its first Registrar General, William Farr, was able to describe the geographical and social epidemiology of all the causes of death. The death rate from tuberculosis fell from 4000 per million in 1840 to 2000 in 1882, when Robert Koch identified *Micobacterium Tuberculosis*. The London Bills of Mortality show that in 1796 about 20% of all deaths were due to smallpox but by the end of the nineteenth century, cases were already rare. Compulsory vaccination, introduced in 1853, and the isolation hospitals attached to the workhouse were among the main reasons for this dramatic decline. Furthermore a *public health police force* was established by the Medical Act of 1848 which provided for the appointment of Medical Officers of Health (MoH). A succession of Acts gave the MoHs power to control rubbish dumps, food purity, animal slaughterhouses and poisonous effluents and fumes. Once set up, the powers of the MoHs grew both in terms of the power to investigate and prosecute the perpetrators of offences against the public health.

Strangely, in the face of these vast improvements in the public health, the major part of the medical profession stood aloof making no direct contribution. Edwin Chadwick was a lawyer not a doctor; Florence Nightingale was a woman, and thus effectively excluded from the medical profession. With Elizabeth



Blackwell, who was in great demand as a lecturer on health and sanitation, Florence Nightingale and other female activists, by creating the National Health Society of London with the motto *Prevention is better than cure*<sup>29</sup> showed that women in the medical profession were almost a century ahead of most of their male colleagues! Although many individual doctors did make contributions, for example John Snow's intervention in the Soho cholera outbreak in 1854, the professional bodies of the doctors remained bystanders. The relative indifference of the medical establishment to preventive, as distinct from curative, medicine, and to environmental and occupational medicine, is a legacy still with us today<sup>30</sup>.

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