

Anti-vaccinationists past and present

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The British Vaccination Act of 1840 was the first incursion of the state, in the name of public health, into traditional civil liberties. The activities of today's propagandists against immunisations are directly descended from, indeed little changed from, those of the anti-vaccinationists of the late nineteenth century, say Robert Wolfe and Lisa Sharp

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Much attention has been given on the internet to the "anti-vaccination" movement—using vaccination in its wider sense of "any immunisation"—and its possible harmful effects on uptake rates of immunisations. Many observers believe that the movement is something new and a consequence of concerns arising from the large number of immunisations now given, but concern over vaccination began shortly after the introduction of smallpox vaccination and has continued unabated ever since. Methods of disseminating information have changed since the 19th century, but the concerns and activities of anti-vaccination movements in the United Kingdom and their counterparts in the United States have changed little since then. The historian Martin Kaufman, writing about anti-vaccination movements in 19th and early 20th century America, concluded his paper with this comment, "With the improvements in medical practice and the popular acceptance of the state and federal governments' role in public health, the anti-vaccinationists slowly faded from view, and the movement collapsed."¹ We hope that a brief historical examination of anti-vaccination sentiments will give medical professionals a better sense of perspective about the groups opposing immunisations and their arguments.

Widespread vaccination began in the early 1800s following Edward Jenner's presentation of an article to the Royal Society of London in 1796 detailing his success in preventing smallpox in 13 people by inoculation with live infectious material from the pustules or scabs of people infected with cowpox. The process induced cowpox, a mild viral disease that conferred immunity to smallpox. Jenner called the cowpox material "vaccine" (from *vacca*, the Latin for cow) and the process vaccination. Although Jenner did not discover vaccination,² he was the first person to confer scientific status on the procedure and was chiefly responsible for popularising it.³

The Vaccination Acts (1840-98) and resistance to vaccination

In the United Kingdom, the Vaccination Act of 1840 provided free vaccinations for the poor and outlawed "inoculation," which at that time meant "variolation," inoculation of smallpox material (usually at an

Summary points

Edward Jenner was largely responsible for introducing vaccination to the medical community, and widespread vaccination began in the early 1800s

Vaccination acts passed between 1840 and 1853 made vaccination compulsory in Britain, and almost immediately anti-vaccination leagues challenged the law as a violation of civil liberty

In 1898 the vaccination law was amended to allow exemption for parents, based on conscience, which introduced the concept of "conscientious objector" into English law

Anti-vaccination groups have continued into the 21st century and are highly visible on the internet, presenting arguments remarkably similar to those of the 19th century

unobtrusive site, to prevent later disfigurement by natural infection). The Vaccination Act of 1853 made vaccination compulsory for all infants in the first three months of life and made defaulting parents liable to a fine or imprisonment. The Act of 1867 extended the compulsory vaccination requirement to age 14, with cumulative penalties for non-compliance. These laws were a political innovation that extended government powers into areas of traditional civil liberties in the name of public health.⁴

Resistance to these laws began immediately after passage of the 1853 law, with violent riots in Ipswich, Henley, Mitford, and several other towns.⁵ The founding of the Anti-Vaccination League in London in the same year provided a nucleus for opponents of vaccination. After the 1867 law was passed its opponents focused concern upon the infringement of personal liberty and choice. The Anti-Compulsory Vaccination League was founded in 1867 in response to the new law, with a seven point mission statement on the masthead of its newsletter, the *National Anti-Compulsory Vaccination Reporter*, beginning:



Two boxes appear
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I. It is the bounden duty of parliament to protect all the rights of man.

II. By the vaccination acts, which trample upon the right of parents to protect their children from disease, parliament has reversed its function.

III. As parliament, instead of guarding the liberty of the subject, has invaded this liberty by rendering good health a crime, punishable by fine or imprisonment, inflicted on dutiful parents, parliament is deserving of public condemnation.

William Hume-Rothery, president, 1878,
Anti-Compulsory Vaccination League.⁶

A large number of anti-vaccination tracts, books, and journals appeared in the 1870s and 1880s. The journals included the *Anti-Vaccinator* (founded 1869), the *National Anti-Compulsory Vaccination Reporter* (1874), and the *Vaccination Inquirer* (1879).⁴ Similar movements flourished elsewhere in Europe. In Stockholm, the majority of the population began to refuse vaccination, so that by 1872 vaccination rates in Stockholm had fallen to just over 40%, whereas they approached 90% in the rest of Sweden. Fearing a serious epidemic, the chief city physician, Dr C A Gråhs, demanded stricter measures. A major epidemic in 1874 shocked the city and led to widespread vaccination and an end to further epidemics.⁷

In Great Britain, pressure from the anti-vaccination movement was increasing. After a massive anti-vaccination demonstration in Leicester in 1885 that attracted up to 100 000 people, a royal commission was appointed to investigate the anti-vaccination grievances as well as to hear evidence in favour of vaccination. The commission sat for seven years, hearing extensive testimony from opponents and supporters of vaccination. Its report in 1896 concluded that vaccination protected against smallpox, but as a gesture to the anti-vaccinationists it recommended the abolition of cumulative penalties. A new Vaccination Act in 1898 removed cumulative penalties and introduced a conscience clause, allowing parents who did not believe vaccination was efficacious or safe to obtain a certificate of exemption. This act introduced the concept of the “conscientious objector” into English law.^{8,9}

North America

Anti-vaccination activity also increased in the United States towards the end of the 19th century; widespread vaccination in the early part the century had contained smallpox outbreaks, and vaccination fell into disuse. However, in the 1870s the disease became epidemic owing to the susceptibility of the population. As states attempted to enforce existing vaccination laws or pass new ones, vigorous anti-vaccination movements arose. In 1879, after a visit to New York by William Tebb, the leading British anti-vaccinationist, the Anti-Vaccination Society of America was founded. Subsequently, the New England Anti-Compulsory Vaccination League was formed in 1882 and the Anti-Vaccination League of New York City in 1885. Using pamphlets, court battles, and vigorous fights on the floors of state legislatures, the anti-vaccinationists succeeded in repealing compulsory vaccination laws in California, Illinois, Indiana, Minnesota, Utah, West Virginia, and Wisconsin. A continual battle was waged between public health authorities and anti-vaccinationists, with the anti-vaccinationists battling

The Vaccination Monster



A mighty and horrible monster, with the horns of a bull, the hind of a horse, the jaws of a krakin, the teeth and claws of a tyger, the tail of a cow, all the evils of Pandora's box in his belly, plague, pestilence, leprosy, purple blotches, foetid ulcers, and filthy running sores covering his body, and an atmosphere of accumulated disease, pain and death around him, has made his appearance in the world, and devores mankind—especially poor helpless infants—not by sores only, or hundreds, or thousands, but by hundreds of thousands (vide *Vaccinae Vindicia*: 413, 423).

This monster has been named vaccination; and his progressive havoc among the human race, has been dreadful and most alarming.

Yet, strange to tell, this monster has found not only a multitude of friends but worshipers, who prostrate themselves before him, and encourage his voracious appetite.

Do not the men, the heroes—who first dared to stand forth to arrest the progress, and stop the fatal havoc of this most dreadful and destructive monster, and at length have bravely subdued and put him to flight with all his mighty host, merit an obelisk created to their fame, with their names inscribed upon it, in indelible characters, to be held in grateful remembrance through all future generations?

And are not these names MOSELEY, ROWLEY, BIRCH, SQUIRREL, LIPSCOMB?
London, 1807

“Nothing New Under The Sun” from the Vaccine Damage Prevention website. (Accessed 8 Aug 2002)

vaccination in the courts and instigating riots in Montreal and Milwaukee.¹

Anti-vaccinationists in two centuries

Towards the end of the 20th century, a wave of anti-vaccination activity led to an increase in media interest in the arguments attacking childhood immunisations. We have culled arguments from the present-day anti-vaccination movement and compared them with those of its 19th century counterparts (box A on bmj.com) which the anti-vaccination headings are taken chiefly from a study by Leask and Chapman of anti-vaccination themes as expressed in the press.¹⁰ Box B on bmj.com summarises the characteristics and impact of the anti-vaccination movement, comparing the late 19th century with late 20th century. These show uncanny similarities, suggesting an unbroken transmission of core beliefs and attitudes over time.

These comparisons emphasise that, regardless of how the medical establishment feels about anti-

Towards a solution to the controversy?

“The insistent questioners of mainstream practice will not go away and will not be silenced. They will trouble majorities. The wise goal is to promote understanding that can at least see to it that the troubling is creative and not merely disruptive.” (Martin E Marty, theologian)

vaccinationists, it is important to understand that they have deeply held beliefs, often of a spiritual or philosophical nature,¹¹ and these beliefs have remained remarkably constant over the better part of two centuries. The movement encompasses a wide range of individuals, from a few who express conspiracy theories, to educated, well informed consumers of health care, who often have a complex rationale for their beliefs, related to a “mixture of world views held about the environment, healing, holism ... and a critical reading of the scientific and alternative literature.”¹²

Vaccination is unique among de facto mandatory requirements in the modern era, requiring individuals to accept the injection of a medicine or medicinal agent into their bodies, and it has provoked a spirited opposition. This opposition began with the first vaccinations, has not ceased, and probably never will. From this realisation arises a difficult issue: how should the mainstream medical authorities approach the anti-

vaccination movement? A passive reaction could be construed as endangering the health of society, whereas a heavy handed approach can threaten the values of individual liberty and freedom of expression that we cherish. This creative tension will not leave us and cannot be cured by force alone.

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Working with the private sector: the need for institutional guidelines

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Cooperation between academic institutions and the private sector does not always run smoothly. Gill Walt, Ruairi Brugha, and Andy Haines from the London School of Hygiene and Tropical Medicine point up the need for guidance on entering into partnership with a commercial partner and describe the school’s experience in formulating guidelines for its staff

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One of the most striking changes in the research environment over the past 10 years has been the marked expansion of links between the private and public sectors. While certain research groups in universities and research institutes have long received some funding from the private sector, such sponsorship is growing and is often now described as “partnership.” The increasing frequency and complexity of interactions between research and industry suggest that institutions require policies, especially when dealing with potential conflicts of interest. A number of academic institutions, mainly in the United States, have developed policies and procedures to guide staff in developing relationships with the private sector (box 4), as have many of the organisations of the United Nations. Research institutions in the United Kingdom are beginning to look at this issue. For example, the Confederation of British Industry has collaborated with a number of bodies to produce general guidelines to better practice for industry and universities — *Partnerships for Research and Innovation*.¹ In this paper we argue that academic institutions, in consultation with their staff, should

Summary points

Links between the private and public sectors have expanded over the past decade

Such links are broadly welcomed, but the potential for conflicts of interest is a matter of concern

Conflict could affect research priorities; the quality, outcome, and dissemination of results; and public trust in science and research institutions

Draft guidelines on public-private collaboration cover prerequisites for considering a collaboration, terms and conditions of contracts, and screening and monitoring procedures

Such guidelines are needed if the academic community is to fulfil its privileges of “self governance and academic freedom”