Saturday 29 August 1998

BMJ

The Public Health Act of 1848

The act's qualities of imagination and determination are still needed today

Editorial p 550
Recent advances p 584
Education and debate pp 587-98

The 1848 Public Health Act is 150 years old. Its context, origins, content, and compromises are extensively reviewed in this issue by Hamlin and Sheard (p 587).[1] It was an exercise in effective politics, technically remarkably well informed, yet also an imaginative legislative attempt to deal with some still very current issues. How can the best technical public health competence be created in both the essential aspects of the public health discipline—knowledge and action? How can this technical competence be allied to effective combinations of central and local governance and administration? What is the role of law, and enforcement? How can the multisectoral content of public health be addressed? How can communities and individuals best be involved? How can private and corporate influences be brought on board? Above all, how can public health be made to count? These are formidable questions, yet the act shows what can be achieved with imagination and determination. We need to find these same qualities today if public health is to move centre stage.

There is no doubt that it needs to do so. Internationally health is improving, but not enough.[2] Although average life expectancy has been increasing throughout the 20th century, three out of four people in the least developed countries today are dying before the age of 50. Within Europe a great divide has opened between western and eastern European countries[3]: in the Russian Federation average life expectancy for men is now below 60 years—that is, below the age of retirement. And in western Europe too, deep economic and social divisions exist in health: in the United Kingdom a child born today in the highest social class can expect to live five years longer than a child born in the lowest.[4]

Within a UK context, *Our Healthier Nation* clearly identifies the determinants of health—genetic, social, economic, environmental, lifestyle, and health services.[5] The challenge for public health is to affect these influences to promote health. The globalisation of information and economic activity has made these influences more complex and more removed from a purely national frame of reference than was the case in 1848.

Both internationally and nationally public health strategy and leadership are required. Both need to be more effective than hitherto, particularly in creating and sustaining effective actions that result from public health knowledge. Often there has been much analysis, but little change. Internationally, for example, the effectiveness of the World Health Organisation's health for all strategy[6] certainly needs reinforcing. And in the UK the public health function,[7] initially full of promise, has often become preoccupied with NHS management and the cost effectiveness of clinical services. Both are important but have limited impact on public health because health services are probably one of the least powerful of the determinants of health in any society.[8]

Today it is clear that health improvement must be set within an arena much wider than health services—namely, the sustainable development of societies, for which health is a prerequisite as well as one of the most important consequences. Health is therefore intricately related to political, economic, social, environmental, and institutional circumstances.[9] This concept is at the heart of the new global health for all strategy endorsed by the World Health Assembly earlier this year.[10] A new European health for all strategy will be considered by the WHO European Regional Committee in September. Both focus on promoting equity and solidarity for health and unlocking resources and promoting accountability for health consequences across the whole range of societies. The aim is to give a more powerful strategic thrust to health improvement and act as a backcloth to national strategies such as *Our Healthier Nation*.

Public health leadership will be crucial. Promoting education and practice in public health is seen as a key European regional priority and a vital prerequisite for achieving realisable improvements in health. Within the UK the chief medical officer's project to strengthen the public health function[11] has begun to identify ways to achieve this goal. Public health surveillance and information; a strong evidence base; and strengthened education and research are all vital elements.

Yet perhaps something remains missing—namely, coherence and a common sense of purpose among all the many practitioners of public health. A unifying concept is important. One that has been proposed is that of public health management: the concept of mobilising society's resources, including those of the health service, to improving the health of populations.[12] Such a concept provides the necessary multidisciplinary focus and link between all public health practitioners, rather than simply those who are medically trained. It is a functional concept, relevant to all societies, irrespective of their administrative and professional structures.

What of a new public health act? Or a public health commission? On the former there is probably now agreement that in certain areas of public health practice, notably infectious diseases, environmental

BMJ 1998;317:549–50

health, and food safety, some legal amendments are necessary, as Kenneth Calman points out in his article (p 596).[13] Beyond that there is as yet no clear sense that new national or even European legislation will help us reach where we want to be—namely, with public health policy and practice that is comprehensive and effective within societies.

Similarly, the idea has been mooted (among others by Sram and Ashton (p 592)[14]) of a commission for public health, independent of government, to advise on all relevant issues and evaluate the public health implications of the policies and actions of all public bodies. It is an appealing notion and may have a role. Yet it is not sufficient.

Ultimately the objective is to make the public health function count at all levels of societal governance and influence, public and private. This implies making the public health function more comprehensive and coordinated, better focused, more skilful, and above all more effective. Some ideas are worth considering: firstly, separating public health practice from NHS management; secondly, linking public health practitioners to structures such as local government that are properly multisectoral and rooted in communities; thirdly, requiring the production of public health reports which are regular, comprehensive, and biased towards action by politicians, professionals, and the public alike; and, finally, protecting again the independence of public health practitioners.

Two new public health technologies will be of great importance. Strategic health programming should provide the local unity and inclusiveness of purpose required to achieve multisectoral change. Health impact assessments will promote the inclusion of health in policy thinking, as well as accountability for health consequences.

Perhaps, however, the most powerful influences for health lie with the public themselves. Informing them about health determinants, risk and uncertainty, and options for policy and action may be the most constructive role that public health practitioners can play. Such a view puts public health back where it belongs—and where the 1848 act positioned it: technically expert, but rooted in functioning democracies at both central and local levels.

Richard Alderslade *Regional adviser*

Partnerships in Health and Emergency Assistance, WHO Regional Office for Europe, DK 2100 Copenhagen, Denmark

1 Hamlin C, Sheard S. Revolutions in public health: 1848 and 1998? *BMJ* 1998;317:587-91.
2 World Health Organisation. *The world health report 1998. Life in the 21st century: a vision for all.* Geneva: WHO, 1998.
3 World Health Organisation. *Health in Europe.* Copenhagen: WHO Regional Office for Europe, 1995.
4 Leon DA, Vågerö D, Olausson PO. Social class differences in infant mortality in Sweden: comparison with England and Wales. *BMJ* 1992;305;689-91.
5 Department of Health. *Our healthier nation.* London: Stationery Office, 1998.
6 World Health Organisation. *Global strategy for health by the year 2000.* Geneva: WHO, 1982.
7 Department of Health. *Public health in England.* London: Stationery Office, 1998.
8 Preker AS, Feachem RGA. *Market mechanisms and the health sector in Central and Eastern Europe.* Washington, DC: World Bank, 1995:20-1.
9 World Health Organisation. *Social determinants of health: the solid facts.* Copenhagen: WHO Regional Office for Europe, 1998.
10 World Health Organisation. *Health for all in the twenty-first century.* Geneva: WHO, 1998. (51st World Health Assembly, document A51/5.)
11 Department of Health. *Chief Medical Officers' project to strengthen the public health function in England : a report of emerging findings.* London: Department of Health, 1998.
12 Hunter DJ, Alderslade R. Public health management. *Health Services Journal* 1992; 19 Mar: 22-3.
13 Calman K. The 1848 Public Health Act and its relevance to improving public health in England now. *BMJ* 1998;317:596-8.
14 Sram I, Ashton J. Millenium report to Sir Edwin Chadwick. *BMJ* 1998;317:592-5.

From public health to the health of the public

Modern public health problems will not be solved by anything as simple as sewers

Editorial p 549
Recent advances p 584
Education and debate pp 587-98

"I have … been taken to see the worst parts of the worst towns in England … but never did I see anything which could compare with Merthyr … one of the most strongly marked cases of the evil so frequently observed, of allowing a village to grow into a town, without providing the means of civic organisation. It is the story of laissez-faire carried out to its legitimate conclusion."[1] So said P H Holland writing to the General Board of Health on 15 December 1853. The priority was for clean drinking water and sewage disposal "before the cholera returns." Holland hoped that the yet to be appointed officer of health would agree, since he believed that "the labour of such (an) officer will do much to remove the ignorance which has permitted such evils to arise, to arouse the apathy which allows their continuance and to overcome the opposition which impedes their removal. Such officers would show the fearful amount of suffering disease and death … . They would prove that the losses occasioned by avoidable sickness and its consequences reduce a well paid population to poverty and render it more difficult to live with comfort in Merthyr on high wages than on the low wages of even Dorsetshire."

Holland was appealing for the application of the permissive powers of the 1848 Public Health Act. The remedy was sanitary engineering by local government; the key, public health advocacy based on locally collected quantitative evidence. It worked, and through the success of sanitary engineering the profession of public health rose to respectability. From sanitation, public health moved into food and housing, tackling malnutrition and tuberculosis, then health care for pregnant women and children.[2] With the introduction of the NHS, however, public health doctors, left behind in local government, fell into the doldrums.

Social care became the province of social workers, the environment of environmental health officers, and the doctors changed their name. But social medicine, then community medicine, failed to describe a distinctive and convincing role in the minds of the public or medical profession. When public health doctors were directed into administering services, even their

BMJ 1998;317:550–1

traditional function of communicable disease control deteriorated.[3] Within the corporate management structure of health authorities frankness with the public was discouraged and advocacy muted.[4] Public health has now regained its traditional name, but all that that has achieved in many people's eyes is to narrow down "public health" to a medical subspecialty concerned with health care, not prevention.

The renaissance of public health was announced 10 years ago[3–5]—prematurely, but the window of opportunity has now opened.[6] The issue 150 years on from Chadwick is that relative inequalities in health persist.[7] Merthyr still has the worst health in Wales.[8] These inequalities are rooted in the socioeconomic structure of society,[9] mediated by environmental and social factors. Consequently, there are no simple modern day equivalents to drains and sewers. The answers have to come by coordinating the health impact of housing, transport, urban and rural planning, pollution control, food and water safety, and waste disposal, etc, as well as the NHS.[2 7]

The opportunity now exists to make the structural changes that will sustain the momentum for the new public health initiative.[7] In his 1997 Rock Carling fellowship lecture Walter Holland concluded that the creation of a National Commission of Public Health, though a neat and appealing option, was untenable.[2] The realistic option was to strengthen the public health function within existing structures. What, therefore, might be done? Local authorities, health authorities, and other key agencies could be made to work together on health. Chief environmental health officers and directors of public health should each be required to be public health advocates, reporting regularly and systematically on all aspects of the public's health and the environment. The independence of their roles could once again be protected. Routinely collected data on health and the environment (such as air quality) must be recast in the context of public health surveillance, providing information for action.[10]

Yet all this laudable activity still assumes that "public health" is essentially a professional activity, doing things to people's health. But in the new information age it is the public themselves who will drive the agenda. The one thing that will sustain the momentum is providing open access to individuals to comparative information about their own health, environment, and health care.

Stephen Palmer *Mansel Talbot professor of epidemiology and public health*

University of Wales College of Medicine, Cardiff CF4 3QX (stephen.palmer@cdsc.wales.nhs.uk)

1 Holland PH. *Sanitary aspect of Merthyr*. Whitehall, 15 Dec 1853. Public Record Office, Kew: MH13/125/(10).
2 Holland WW, Stewart S. *Public health, the vision and the challenge*. London: Nuffield Trust, 1998.
3 Department of Health. *Public health in England*. London: HMSO, 1988 (Acheson report).
4 Public health advocacy: unpalatable truths. *Lancet* 1995;345:597-9.
5 What's new in public health? *Lancet* 1991;337:1381-3.
6 Department of Health. *Our healthier nation: a contract for health*. London: Stationery Office, 1998.
7 Acheson ED. Edwin Chadwick and the world we live in. *Lancet* 1990;336:1482-5.
8 Welsh Office. Welsh health survey. Cardiff: Welsh Office, 1995.
9 Wilkinson RG. *Unhealthy societies: the afflictions of inequality*. London: Routledge, 1996.
10 Langmuir AD. William Farr: founder of modern concepts of surveillance. *Int J Epidemiol* 1976;5:13-8.

Providing spectacles in developing countries

Millions endure poor vision for want of affordable glasses

Imagine the scenario. You are an indigenous teacher or civil servant stationed in a small rural community in a tropical country. Almost by definition you are over the age of 40 as your government has not recruited any public employees for several years on the advice of the World Bank and International Monetary Fund. You are a worried man. Your second daughter, always the intelligent one among your children, has begun to perform poorly in school. Her teacher says she makes too many mistakes when copying her lessons from the blackboard. Your wife is also distraught. Her mother, who recently underwent a cataract operation at great expense (your own), does not see well enough to return to her village. And worse, your own eyes seem to be failing and you can no longer study in the evenings for that professional diploma that would bring a promotion at work. Your distress is heightened by the knowledge that even if you travelled the 350 miles to the capital during your annual holiday the waiting list to see the ophthalmologist is over four months long and the price of the three pairs of glasses at the optician's shop well beyond your reach. Affordable glasses accessible in every community would transform this scenario.

BMJ 1998;317:551–2

In 1990 the World Health Organisation undertook a nationwide survey of blindness and visual handicap in the Republic of Benin, west Africa.[1] Among the findings was the startling number of people needing spectacles—580 000 from a population estimated at 4.5 million, that is, 12.8 %. At that time there were only five Beninois ophthalmologists, all of whom worked in the two major cities, both on the south coast, 20 miles apart. Opticians were equally rare. Therefore access to a specialist who could prescribe spectacles was limited and even then the price of glasses might exceed three months' average salary.

Benin is a small country. There are 20 francophone nations in Africa south of the Sahara, with a population estimated at 161 million (1994). Therefore, probably over 20 million people in these countries alone need a pair of glasses. Serving this population in 1994 were 216 ophthalmologists (1:745 000 people).[2] Most of the population live in rural areas, but the ophthalmologists work almost exclusively in the major cities. The situation in English speaking Africa may be better, but that in the Portuguese speaking countries (Angola, Mozambique) is even worse.