EVIDENCE BASED PUBLIC HEALTH POLICY AND PRACTICE

The importance of the past in public health

Gabriel Scally, Justine Womack

See end of article for authors' affiliations

J Epidemiol Community Health 2004;58:751-755. doi: 10.1136/jech.2003.014340

Correspondence to: Dr G Scally, Regional Public Health Group, Government Office for the South West, 2 Rivergate, Temple Quay, Bristol BS1 6ED, UK; gscally.gosw@ go-regions.gsi.gov.uk

Accepted for publication 16 October 2003

Study objective: To explore the role of history in public health and its relevance to current practice and professional development.

Design: An analysis of the issues surrounding the poor attention paid to the history of public health by its current practitioners.

Setting: The paper is written from the perspective of practitioners in the UK but has wide applicability. **Main results:** The paper makes the case that the current neglect of public health history is to the detriment of public health practice.

Conclusions: There is a strong case for more attention to be paid to public health history in professional formation, development, and communication.

"The only thing new in the world is the history you don't know." (Harry S Truman 1884–1972)

t is quite possible for public health practitioners in Britain to go through their professional training and spend their working lives without developing an understanding of the history of public health. In recent years the 150th anniversary in Britain of the passage into law of the 1848 Public Health Acts has raised awareness of the sanitary revolution and its background in the squalor of Victorian Britain. Nevertheless, while many practitioners will have gained some knowledge of stories about public health 'heroes' such as John Snow, it is unusual for practitioners to have the opportunity to develop an understanding of the broad sweep of public health history. Indeed the preoccupation with the acts of great individuals (almost inevitably men) produces a distorted view. As the historian E H Carr said when he delivered the George Macaulay Trevelyan lectures in 1961: "...we shall arrive at no real understanding either of the past or of the present if we attempt to operate with the concept of an abstract individual standing outside society". This unsatisfactory situation is reflected in that public health history is also rarely represented as a strand within the content of professional journals or programmes of continuing professional development.

WHY ARE WE AHISTORIC?

There would seem to be three factors that might explain the limited attention paid to the history of public health by its specialist practitioners in Britain.

Firstly, and perhaps most significantly, is the degree of discontinuity in the organisational and professional arrangements for public health medicine. The changes in title from public health to community medicine and back to public health, added to the removal in the 1970s of the medical aspects of public health from local government to the NHS, have contributed to a loss of professional memory and tradition.

Secondly, as a result of the shift from local government, public health practitioners in the NHS have been orientated towards issues surrounding the provision of personal health services rather than towards the broad economic, environmental, and social determinants of health. It is these broad determinants of health and their effects upon the health of the population that form a substantial backdrop to the

history of public health. With a professional engagement that deals mostly with issues involving the provision of personal health services, it is not surprising that public health history that is largely, but not completely, located outside personal health services issues is neglected.

Thirdly, the rapid turnover in the public health workforce that has been provoked by multiple NHS organisational changes has meant that many practitioners whose professional lives have spanned several eras have taken early retirement. This loss of personal knowledge has not been compensated for in the production of written and documented historical analysis.

IS IT IMPORTANT TO POSSESS A HISTORICAL PERSPECTIVE?

Improving our mastery over the present

According to Carr history offers a dual function, to enable men and women to understand the society of the past and to increase their mastery over the society of the present. Historian John Tosh in *The Pursuit of History* wrote, "To know about the past is to know that things have not always been as they are now, and by implication that they need not remain the same in future".²

One of the characteristics of public health practice is that the timescale within which ill or beneficial health effects are seen, is often protracted. There are, of course, exceptions to this, such as with some acute communicable diseases. However, if we are to improve our mastery over the present it should not be forgotten that there are historical changes in the nature and ecology of communicable diseases that are of relevance to planning for the future.³ In general the observation of population health over a substantial period of time is a pre-requisite for the evaluation of progress, or lack of it, in improving health.

The re-examination and updating of historical datasets has been used as a means of elucidating the effect of early life events on long term health experience. Such epidemiological archaeology may, however, lead to a concentration on individual orientated causative factors of separate diseases and ignore the social and political content in which human communities exist. While not denying the importance of "risk factorology" the science of public health practice requires as much attention as the science of epidemiology.

The understanding of how public health practitioners can influence the health of human communities requires a

752 Scally, Womack

knowledge of how public health practice has evolved, its successes and failures, its highs and lows. The design of interventions such as health action zones, projects aimed at improving the health status of the population in the most deprived areas, in England has strong parallels with the innovative approaches introduced by the 1848 Public Health Acts, the first national public health legislation in Britain, and there are many other historical parallels to contemporary public health initiatives.

Carr highlighted the way history recognises what he called "delayed achievement", the apparent failures of today may turn out to have made a vital contribution to the achievement of tomorrow, "prophets born before their time".¹ Historical awareness helps us to be alert to the resurgence of practice that has held sway in the past but been out of fashion in more recent times.

When "partnership working" was introduced in 1997 by the newly elected Labour government in Britain the idea seemed radical to those who had operated a market led system for the past decade. Yet the notion of a network of organisations collaborating to promote health, prevent ill health, and provide health services was not new—there was simply a fresh emphasis being placed on its importance. Before the introduction of the NHS in 1948, a network of services existed that relied on their interaction with each other and included: the private sector in the form of voluntary hospitals, private medical practitioners and commercial organisations; the public sector in the form of municipal hospitals and community health services run by local government alongside sanitary and environmental health services; and the voluntary sector that provided health services.⁴

The complexity of the pre-NHS era in Britain is a reminder that while the political, social, legislative, and organisational landscape may look considerably different now, taking action on the determinants of health still requires negotiating a complex network of organisational and political structures. We can look back and learn from some of what worked or didn't in previous collaborations.

In chronic disease epidemiology greater attention has been paid in recent years to possible risk factors in childhood rather than solely concentrating on adult risk factors, particularly aspects of lifestyle such as smoking, diet, and lack of physical exercise. This development of "life course epidemiology" is a return to a concept prevalent in the first half of the 20th century that early life experiences influence adult vitality and mortality risk. The rise of the "epidemics" of coronary heart disease and lung cancer in the interwar period shifted attention to the aetiology of specific chronic diseases. In the early post-war period adult risk factors tended to be emphasised because of the interests of cardiologists and physiologists initiating cardiovascular epidemiology.⁵

An appreciation of what has gone before enables us to see why similar approaches lost favour in the past and assess the validity and appropriateness of revisiting old approaches and using them to stimulate new innovations.

An understanding of the rich and diverse history of public health cannot only support contemporary innovation but can help reduce the risk of public health practice being too narrowly focused on specific influences on the health of individuals rather than maintaining an overview of the full range of factors at work across a population. It is, however, important to remember that what history provides is a useful benchmark and knowledge base rather than a fit for purpose solution.

Strengthening the identity of public health

A sobering thought for public health professionals is Carr's view that "A society which has lost belief in its capacity to progress in the future will quickly cease to concern itself with

its progress in the past".¹ Tosh also saw the importance of history in building social identity when he wrote, "History is a collective memory, the storehouse of experience through which people develop a sense of their social identity and their future prospects. People who profess to ignore history are nevertheless compelled to make historical assumptions at every turn".²

Jane Lewis has put forward a view that during the first three quarters of the 20th century public health was characterised by its failure to define its fundamental identity and purpose and its tendency to call whatever activities it undertook "public health". She has portrayed a field of endeavour buffeted by political and structural changes, undergoing rapid changes of title and suffering from a lack of professional status.

Berridge has highlighted the tension between the duality of the role of public health with its focus on prevention and health promotion and its inability to escape from its link to planning and management of personal health services.⁷

Understanding the factors behind this duality and placing current practice, organisational structures, political and public health philosophies within a historical framework can help us to resolve the tensions that exist within our field and increase our sense of identity and purpose. Increasing our understanding of public health history can improve our insight into the way in which we fit into the wider picture and serve to embolden us in our navigation of the political and organisational structures that exist today.

Action on Smoking and Health is a UK based public health advocacy organisation with a strong sense of the importance of practitioners understanding the history of the campaign to reduce smoking related deaths. Its web site contains a wealth of documents, including a useful chronology, that gives practitioners a sense of their contribution to a historic struggle while also providing practical information to enable them to learn from the efforts of others.⁸

Hamlin and Sheard have identified that among the hardest of a historian's jobs is to understand how people move from hope for a different future to practical actions that secure it. Public health professional training is steeped in analysis and practical action, what is sometimes missing is a shared hope or vision. Deepening professional understanding of the past can assist the process of developing such a vision for the future

Understanding public health in a political context

Health historians Berridge⁷ and Porter¹⁰ have both called for greater attention to be paid to the asking of broader questions when looking at the history of public health with the object of generating a greater depth of understanding of issues. Porter, in particular, has highlighted the need to consider population health as a political phenomenon in different periods. It is interesting to look back at chronologies of public health history and then explore the political and social factors at work behind surges in legislative activity, action on a particular issue and swings in public opinion that have translated into health improvements. Understanding the factors at work behind significant developments can teach us a great deal about the many influences we need to consider and the timescale of change that we may face in delivering health improvements. From a 21st century standpoint, there often seem to be long gaps between advances in knowledge or shifts in public opinion and the taking of action that results in health improvement.

If we take the issue of health inequalities in Britain as an example, the time between McGonigle and Kirby's publication of *Poverty and Public Health* in 1936, which showed that poverty inevitably led to malnutrition, Titmuss's *Poverty and Population: A Factual Study of Contemporary Social Waste*, which

used disease and mortality figures to calculate the excess of disease and death in the poorer regions in 1938, and the Black Report, famous for being published tardily by the Department of Health in 1980, seems vast. Again we have to wait another 15 years before the Department produced *Variations in Health: What Can the Department of Health Do?*, which proposed setting specific objectives for reducing variations. In recent years things have moved on considerably in terms of action to tackle health inequalities with the publication of *Our Healthier Nation: A Contract for Health* in 1998, which acknowledged the influence of adverse social, economic, and environmental factors as causes of health.¹¹

Similarly if you look at key dates in the history of antitobacco campaigning, the length of gaps between significant developments can seem extraordinary for those of us in a hurry to tackle the continuing "epidemic" of smoking related disease. London physician John Hill performed possibly the first clinical study of tobacco effects and warned snuff users that they were vulnerable to cancers of the nose as far back as 1761. The Lancet was debating the health effects of tobacco in 1856 and UK parliament passed the Railway Bill mandating smoke free carriages to prevent injury to non-smokers in 1868. Adler made the first strong connection between lung cancer and smoking in 1912 but then we skip to Doll and Bradford Hill's first large scale epidemiological study of the relation between smoking and lung cancer in 1951. A landmark was the 1962 Royal College of Physician's report Smoking and Health and its recommendations for the restriction of tobacco advertising, more restrictions on their sale to children and smoking in public places, and more information on the tar/nicotine content of cigarettes. Yet the second half of the 20th century is a story of real strides being made by anti-tobacco activists through new evidence, innovative and well organised campaigning, changes in public opinion but still the inability to deliver end goals because of the power, influence, and global reach of the tobacco industry. The highs and lows of this story are as gripping as any in public health but the message for today's practitioners is to consider the timescale and effort entailed in continually chipping away at vested interests.12

Most public health campaigns entail overcoming the resistance of vested interests whether political, commercial, or social. History provides many important examples of the factors that contribute to policy change including seat belts and the car industry, and silicosis and asbestos and industry. The history of silicosis and environmental disease policy highlights the impact of public health philosophy and practice of the time-that is, the shift in attention from infectious to chronic disease in the 20th century, the role of organised labour and their judgements about the importance of workers health vis a vis jobs, the affects of different economic climates, the role of key reformers and statisticians, the impact of particular "disasters", and the role of the media in bringing the issue to public attention. It also highlights the different approach taken to health issues affecting a particular population group such as industrial workers and that taken by an issue relating to a broader population such as asbestos.13

Although, as noted above, communicable diseases declined in importance in western countries in the 20th century the problems did not disappear and the lessons learned are of contemporary relevance. Perdiguero and colleagues have used the examples of malaria and influenza in Spain to argue that the use of history can improve epidemiology and the design of causality models. ¹⁴ The problem of HIV and AIDS is an enormous challenge in terms of the global burden of ill health. This is particularly true for the continent of Africa where the problem is devastating. In South Africa the issues of causation and treatment have been at the centre of

political debate.¹⁵ An attempt to understand the reasons why the issues have developed in the way they have in South Africa is unlikely to be successful without an understanding of how sexually transmitted diseases, and syphilis in particular, have in the past played a key part in the creation of the infamous pass laws and the development of apartheid.¹⁶

The ability to learn from domestic and international historical examples has been explored by political scientists in relation to health policy reform. One of the ways they overcome the challenges of comparative historical studies is to focus on a limited number of variables. The conclusion drawn by Marmor is that there are two benefits from this sort of comparison, what can be learned from countries where conditions are comparable and policy generalisation that holds over many divergent cases where there is some powerful factor at work.¹⁷

If we look at the history of public health campaigns common factors emerge, which need to inform our own work. The key ingredients for any policy change that leads to improvements in health are: dissatisfaction, reformers, political support, and public awareness. But to learn from the history of these campaigns they need to be captured in a way that is accessible to practitioners so that historical scoping exercises can become embedded into the early stages of practitioners' work planning. Historians also need to consider the policy considerations occupying the attentions of practitioners to assist them in learning from the past.

The USA has a strong tradition of public health history thanks to the efforts of Henry E Sigerist and George Rosen during the 20th century. As editor of the *American Journal of Public Health*, Rosen urged public health workers to play a political part and to collaborate with social scientists while Sigerist also tried to inspire doctors to be activists to improve social conditions. ¹⁸ The importance of practitioners understanding their political role is essential if they are to lobby more forcefully for the changes that will have real impact on the health of their communities.

HOW SHOULD WE REDRESS THE BALANCE?

The history of public health provides a very useful vehicle for teaching the principles of public health. An understanding of the broad sweep of that history should be a component of the basic training of all health professionals. This is particularly so in respect of those who will have a population and preventative aspect to their work, such as environmental health officials, general practitioners, health visitors, school nurses, and midwives. Considering the interplay of fact and interpretation in history provides good training for analysing currently accepted belief and practice, which can assist professionals in challenging that which is no longer appropriate or relevant.

Marx and Engels held that "History does nothing, it possesses no immense wealth, fights no battles. It is rather man, real living man, who does everything, who possesses and fights". History consigned to the margins may be able to do nothing, but public health practitioners equipped with insight and understanding about the impact of political and social developments on the evolution of public health practice are better armed to fight the many skirmishes that still lay ahead in the battle to improve population health.

For those intending to pursue a long term career in public health, history should be an important component of postgraduate academic training.

The history of public health should be:

Included in the undergraduate curriculums of health professionals;

754 Scally, Womack

- An important component of masters level public health courses;
- Part of the curriculum for examinations of professional bodies in the public health field;
- A regular strand in public health journals;
- The subject of specialised postgraduate programmes, available for those with a particular interest.

Those privileged to have been taught by the late Sidney Chave at the London School of Hygiene and Tropical Medicine as part of masters level programmes will be aware of how interesting and informative such teaching can be. His engaging style and fund of detailed knowledge impressed students from successive generations. However, the provision of such excellent teaching needs to be universal if masters level programmes are to fulfil their role in producing educated practitioners.

There should be an expectation of those responsible for the setting of curriculums for public health professional examinations that they will include a historical component. It is regrettable that none of the mainstream public health journals based in the UK contain a regular strand of papers on public health history.

During his tenure as editor of the *American Journal of Public Health* George Rosen routinely included papers on public health. He introduced the strand "Public Health Then and Now" in an attempt to develop a sense of professional solidarity among public health professionals by providing them with evidence of a common heritage. Other historical strands within the *American Journal of Public Health* include "Voices From the Past", which presents brief historical extracts from the works of public health pioneers that are republished with an accompanying biographical sketch and "Images of Health", which uses a visual reference to make the link between past and present health issues.

The *Journal of the Royal Society for the Promotion of Health* is a rare example of a UK public health journal that carries historical material and the themed issue of the *British Medical Journal* that marked the anniversary of the 1848 Public Health Acts showed how informative and stimulating public health history can be.²⁰

There needs to be a greater appreciation of history as an academic discipline within the broad field of public health. Awareness of the principles of historiography would also serve to encourage professionals to consider how the present skews our view of the past and question the objectivity of different sources of information. The history of occupational disease policy is a good illustration of the way historians place different weights of responsibility on vested interests and political and economic factors. Tosh neatly summed up the value of studying history writing, "...a historical education achieves a number of goals at once: it trains the mind, enlarges the sympathies and provides a much-needed historical perspective on some of the most pressing problems of our time".²

THE ROLE OF HISTORIANS

It is rare for historians to be working within a public health organisation. More often it is an individual public health practitioner or academic who develops an interest in the history of their professional field. While there is no doubt whatsoever that we owe a collective debt to such individuals, the application of the professional skills of a professional historian would better place the historical analysis in a broader social political and economic context. It has been argued that there are real advantages in having a professional historian integrated with public health practitioners and academics.⁷ This concept of "living among the tribe" can enable not only a historical perspective to be brought to bear

on current issues but also allow the history of the present to be better captured for future analysis.

The tensions between the different disciplines of public health practice and historical inquiry need to be recognised with one focused on delivering change in the present and the other focused on identifying the barriers to change in the form of economic or political structures. A historic perspective does, however, provide practitioners with the insight that over a longer time frame change of some sort is inevitable.²¹

DEVELOPING AN INTEREST

It may be that involvement in a particular aspect of contemporary public health practice stimulates an interest in the history of that particular topic. On the other hand a desire to acquire an overall picture of the health of the population down the centuries and the public health response to problems of ill health may be the starting point. There are only a small number of books that provide the broad perspective. Outstanding among the available tracts is George Rosen's *History of Public Health*. ²² Although Rosen's book, falters when it comes to the 20th century, the account of public health progress stretching back to 4000BC is engaging and well informed.

The other classic, internationally recognised public health history text is by the Belgian author René Sand.²³ From a British perspective *A Short History of Public Health* by Frazer Brockington is a readable introduction but lacks the international sweep that the above texts provide.²⁴ A modern and analytical text by Porter has been an imortant addition to the field.²⁵ A useful resource from the perspective of those with an interest in the history of public health in Britain has been the production of a detailed chronology by Michael Warren.¹¹ The full text of this chronology is available on the web (http://www.chronology.org.uk) and the example could be replicated usefully internationally.

An important site for those interested in finding out more will be the Wellcome Trust and its Library for the History and Understanding of Medicine (http://www.wellcome.ac.uk). Membership will give practitioners access to a wealth of resources and its MedHist function provides a guide to medicine resources on the internet, including public health. Specialist journals such as Addiction run regular historical articles and the Action on Smoking and Health web site (http://www.ash.org.uk) provides considerable insight into the history of the anti-tobacco campaign. When announcing that the journal Addiction was going to launch a new occasional series called Addiction History, Professor Berridge explained why it was felt that history would be of use to practitioners reading the journal: "History is not here as some kind of antiquarian peep show. Nor is it here to massage the preconceptions of the present.....historical writing has a wider purpose—to examine the complexities of the interaction between culture and institutions, between differing perceptions of substance use, between the construction of science and the formation of policy, at a national level, but in cross-national perspective, all within the framework of

Key points

- Public health practitioners neglect the history of public health
- A better understanding of the history of their subject would improve the practice of public health professionals.
- Educators and journal editors should include more historical content in courses and journals.

Policy implications

- Curriculum revision is required at undergraduate and postgraduate levels.
- The contemporary history of public health should be captured so as to facilitate future study.

change over time...This perspective alone can induce a more thoughtful and curious response, a realization that our current preconceptions do not necessarily have the status of timeless 'fact'. Nor does change occur to some type of predetermined and rational policy master plan".26

Building up a specialist library, whether of current or historic texts and documents, can be one of the most intriguing and fascinating aspects of developing a historical interest. Although it is now dated, the list of important public health texts provided as an appendix to Sidney Chave's important book Recalling the Medical Officer of Health represents a valuable checklist.²⁷ Borrowing a copy of most of these from a library, usually via interlibrary loan, is not usually a problem. Acquiring a personal copy of a book that is perhaps over a 100 years old or is long out of print has been greatly facilitated by the internet. There are several computer linked international networks of second hand and antiquarian booksellers. Using one meta search engine (http://www. bookfinder.com) several of these networks can be searched simultaneously. Regular searching over time will often locate a rare and sought after book, perhaps on the other side of the world. More dedicated collectors may seek to possess copies of all editions or reprints of a particular book. There is however the ever present danger of the books becoming more valued than their contents.

If a more formal approach to study is required, the London School of Hygiene and Tropical Medicine runs a History and Health study module. It aims to help students develop their ability to take a critical and long term perspective in analysing current health issues. The Masters in Public Health is regarded as the basic qualification for those seeking a career in public health and the Mailman School of Public Health at Columbia University in New York provides a MPH course that specialises in the history of public health and medicine (http://www.healthsciences.columbia.edu/dept/sph/ degree-offerings.html). This two year programme provides competency in both public health and historical analysis.

INTERNATIONAL NETWORK

An international network of those interested in public health history has been developed in recent years. It brings together both the professional historians and public health practitioners from 43 countries, organises regular conferences, and publishes an online journal. Details of the International Network for the History of Public Health can be found at their web site (http://www.liu.se/tema/inhph/).

CONCLUSION

The history of public health has important implications for how we should react to the challenges of contemporary public health practice. Its study and teaching are both neglected and deserve to be given more attention as we invest in the development of the public health workforce. Similarly, the editors of professional journals in the field of public health should give serious consideration to the inclusion of a strand of papers relating to public health history. In our current public health activities we need to be conscious of how our recording of contemporary events will help or hinder the understanding of those events by future students of public health history.

Authors' affiliations

G Scally, J Womack, Regional Public Health Group, Government Office for the South West, UK

Funding: none.

Conflicts of interest: none declared.

REFERENCES

- 1 Carr EH. What is history? London: Penguin Books, 1987.
- 2 Tosh J. The pursuit of history. London: Longman, 1984.
- 3 Zinsser H. Rats, lice and history. London: Penguin Books, 2000.
- Baggott R. Health and health care in Britain. 2nd ed. Basingstoke: Macmillan, 1998.
- 5 Kuh D, Davey Smith G. The life course and adult chronic disease: an historical perspective with particular reference to coronary heart disease. In: Kuh D, Ben-Shlomo Y, eds. A life course approach to chronic disease epidemiology. Oxford: Oxford University Press, 1997.
- 6 Lewis J. What price community medicine? The philosophy, practice and politics of public health since 1919. Brighton: Wheatsheaf, 1986.
- Berridge V. History in public health: Who needs it? Lancet 2000;356:923-5.
- 8 Action on Smoking and Health. http://www.ash.org.uk.
- Hamlin C, Sheard S. Revolutions in public health: 1848, and 1998? BMJ 1998;**317**:587-91.
- Porter D. The history of public health: current themes and approaches. Hygiea Internationalis 1999;1:9–21. http://www.ep.liu.se/ej/hygiea/ (accessed 22
- Warren MA. Chronology of state medicine, public health, welfare and related services in Britain 1066–1999. http://www.chronology.org.uk.
- 12 Action on Smoking and Health. Key dates in the history of anti-tobacco campaigning. http://www.ash.org.uk.
- 13 Rosner D, Markowitz G. Deadly dust: silicosis and the politics of occupational disease in twentieth-century America. New Jersey: Princeton University Press,
- 14 Perdiguero E, Bernabeu J, Huertas R, et al. History of health, a valuable tool in
- public health. J Epidemiol Community Health 2001;55:667–73.

 15 Fassin D, Schneider H. The politics of AIDS in South Africa: beyond the controversies. BMJ 2003;326:495-7.
- 16 Jochelson K. The colour of disease: syphilis and racism in South Africa 1880-1950. Basingstoke: Palgrave, 2001
- Marmor TR. Global health policy reform: misleading mythology or learning opportunity? In: Altenstetter C, Warner Bjorkman J, eds. Health policy reform, national variations and globalization. Basingstoke: Macmillan, 1997
- Fee E, Morman ET. Doing history, making revolution: the aspirations of Henry E Sigerist and George Rosen. In: Porter D, Porter R, eds. *Doctors, politics and* society. Historical essays. Amsterdam: Editions Rodopi, 1993.
- Marx K, Engels F. The holy family or critique of critical critique. Moscow: Foreign Languages Publishing House, 1956
- Various authors. The Public Health Act: 150 years on. BMJ 1998;317:issue
- Fee E, Brown TM. Why history. Am J Public Health 1997;87:1763-5.
- Rosen G. A history of public health. Baltimore: The Johns Hopkins University Press, 2001.
- Sand R. The advance to social medicine. London: Staples Press, 1952.
- Brockington CF. A short history of public health. London: Churchill, 1956.
- Porter D. Health civilization and the state: a history of public health from ancient to modern times. London: Routledge, 1999.
- Berridge V. Addiction history. Addiction 1997;92:253-5.
- **Chave S.** Recalling the medical officer of health. London: King Edward's Hospital Fund, 1987 (This edition edited by Warren M, Francis H).