This unsportingly exploits the fact that termites communicate by fleeting touch. This resembles the symbolic peck on both cheeks used by western socialites and eastern potentates to greet each other. Termite soldiers returning from the breach, tell the usual warrior's tales of daring deeds. The word is spread, and with it the arsenic. A wave of death by handshake washes over the colony.

Some termites are jobbing builders, others have vision. The cathedrals of the termite world are to be seen in drier country areas, where mounds 10–12 feet high dot the landscape. Like cathedrals, most take a long time to built and last, for many years, perhaps as many as 150. Others are more quickly built, and pilots of light aircraft hoping to land on unpaved, emergency airstrips, may be alarmed to find that a new block of termite apartments has appeared on the runway since the last touchdown. Aspect also seems to be as important to some termites as it is to some humans. As their name implies, *Hamitermes meriodionalis* of the Northern Territory, has a fine sense of direction, carefully constructing 'compass' mounds with a long axis pointing North–South, and an internal network of chambers apparently orientated to maintain constant temperature and humidity throughout the year, whatever the angle of the sun's rays.

To the untutored European eye, an Australian wooden house perched on stumps, standing in splendid isolation in a garden or 'yard' stripped of trees is a rather stark sight. No matter, ambience is soon added—stumps are hidden behind partition walls to give extra living space, fast growing eucalyps are planted close by, flowering creepers adorn the walls, gardens are landscaped with timber steps and pine bark, micro-irrigation systems keep everything moist and fertile.

Below the earth, the quiet army mobilises, unable to believe its luck, as it prepares for a little house moving of it's own. Bit by bit.

CORRIGENDUM

On p. 438, para 2 of vol. 24 the opening sentence of *Letter from Australia* should read: This will cause no surprise to those who have tried to raise Darwin's flag in the creationist camp, but like all good studies, it *poses as many questions as it answers. These students must* possess a remarkable ability to quarantine conflicting thoughts, accepting or rejecting *empirically established scientific evidence, not according to the quality of the science, but to* its compatibility with religious doctrine.

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# Book of the Quarter

## A HISTORY OF EDUCATION IN PUBLIC HEALTH: 'HEALTH THAT MOCKS THE DOCTORS' RULES'

*Edited by Elizabeth Fee and Roy M. Acheson, Oxford University Press, 1991, pp. 349 £35.00.*

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### THE NEED FOR THIS BOOK

The editors of this multi-author volume felt they were filling a gap in the information market. Although the history of science and the history of medicine were both well-established disciplines, there had been no comprehensive account of education in public health. In particular, the notable contrasts in the development of training in the USA and UK had not been adequately addressed. However, Elizabeth Fee and Roy Acheson did not simply see themselves as making a contribution to the historical record. They envisaged teachers of their subject throughout the world making practical use of such a text in deciding how to set up their own, local arrangements. It would, the editors must have fancied, serve as a kind of cookery book from which deans and professors could pick and mix ingredients to suit their scholastic requirements. It may not have been the authors' intent, but the cautionary tales in this compendium also provide lessons on how not to manage the public's health for it turns out that the contents do not merely offer check lists for the convenience of curriculum planners but supply parables based upon the internecine struggles between clinical doctors, whose primary business is the care of the sick, and public health workers, whose prime concern should be prevention.

### CONTRASTS AND SIMILARITIES

In both the UK and the USA the history of public health is characterised by conflicts, the most fundamental being that between clinicians and public health practitioners. Within public health itself, there have often been unresolved tensions between research-orientated academics and the workers in the field who have found aspects of their initial training to be inappropriate. Underlying the struggles over status and prestige there have been successive disagreements amongst teachers over what to include in courses, as the field has been repeatedly modified and redefined in response to changes in society. Scarce wonder that the syllabus must seem to some students as a confusing rag-bag of old and new elements.

It was the perceived impact upon health of rapid industrialisation and urbanization which originally brought home the necessity for public or state intervention in both countries, though the process started later in the USA than in the UK. As medical practice expanded in the USA, it was in a personal, entrepreneurial fashion and fortunes could be made by popular physicians. The writers in this book repeatedly point out how this has continued to be the American situation,

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where doctors have infinitely preferred private practice to the prospect of filling salaried public health positions, and very few indeed have been tempted to undertake training. In consequence, American schools have come to teach Masters courses to a wide variety of non-medical graduates who may subsequently become biostatisticians, epidemiologists, policy analysts, microbiologists, sanitary engineers and so forth. If they join the public health service thereafter, it will be at state, city or county level.

In the UK, the great majority of those doctors who are trained in public health go on to work for health authorities, although some become academics or researchers. The details of training are now laid down by the Faculty of Public Health Medicine of the Royal Colleges, with preparatory courses offered by a number of university departments and standards monitored by the General Medical Council. Chapters in this book trace the development of the educational process in both countries in considerable detail, but the key point to note is the fact of medical domination in the UK as opposed to the USA.

Over one hundred and fifty years the business of public health and the contents of courses have responded to new circumstances. Whether or not this mainly reactive mode has been desirable or inevitable is a matter for debate. But no observer can fail to note the chameleon like guises adopted by the subject. This has been signalised in the UK by a succession of names. Thus we have known sanitary science, sanitary engineering, state medicine, preventive medicine, social medicine, clinical epidemiology and, most recently, public health medicine. The whole area has been beset by repeated crises of identity. Those concerned to represent themselves in public to other doctors have been obliged to adopt a series of new faces and euphemisms, only to experience the embarassment of being rapidly overtaken by events.

### BRITISH HISTORY

Between them, Roy Acheson and Elizabeth Fee have supplied the introduction to this book and several subsequent chapters. Inevitably the result comprises, as far as the UK is concerned, a history of public health as much as of education. Roy Acheson's account is meticulous and will mainly interest scholars from named universities, of which Edinburgh is notable as the second (after Dublin) to have offered a degree. The hey-day of the diploma came early this century, by which time standards for training had been laid down by the GMC. The emphasis was originally upon bacteriology and the control of infection, partly giving way subsequently to a concern with the health of women and children, personal preventive medicine, biostatistics and health education, with aftercare and rehabilitation in addition. For a time, between 1929 and 1948, medical officers of health of the local authorities were responsible for managing and administering the former Poor Law hospitals.

After World War II and the birth of the welfare state, criticisms of the state of public health practice came from internationally respected academics, notably Ryle of Cambridge and Crewe of Edinburgh. They conceived of 'social medicine', the study of man in his environment, and saw diseases as manifestations of conflict or imbalance. For a time the new philosophy re-awakened the social conscience of the discipline, which had been the mark of certain early pioneers and then lost in day to day routines. There was a keen desire to further the



nation's health by improving social circumstances. Attention ought to be upon research, designed to uncover the specific factors responsible for disease states. So the original prophets of social medicine were joined by a number of brilliant epidemiologists, like Cochrane, Doll, Fletcher and Morris. The movement and its avatars were far removed indeed from the humdrum concerns of most medical officers of health, but the curricula of university departments were duly altered and names modified accordingly.

By 1974, with the re-organisation of both health and social services underway, necessity was turned into invention. Plans had been dreamed up to rehabilitate or transform the now redundant Medical Officer of Health, in the former Local Authority (LA) public health departments, and to bring them, together with academics, beneath the shared umbrella of a new Faculty of Community Medicine of the Royal Colleges. Thus, in one sweep, the old difference between service administrators and university teachers was to disappear. All now had the opportunity, with a modicum of 'retraining', to be born again as clinical consultants, with all the associated financial and, supposedly, status advantages. A new scheme of post-graduate education was accordingly devised.

The originators of this scheme believed that it constituted a great leap forward. At a single blow, the divisions between clinical medicine and public health and the difference between branches of the latter were to be eradicated. Roy Acheson's account of the whole process of death and rebirth is suitably detached, but some of the more visionary fellows of the Faculty conceived of the fine new speciality of community medicine as the centre of the medical universe, the prime mover which would hitherto dominate the entire planetary, or planning, system.

### PUBLIC HEALTH TRAINING IN AMERICA

The development of education for public health in the US is covered by Elizabeth Fee, Dorothy Porter, Barbara Rosenkrantz and Arthur Viseltear. There is considerable repetition, as transatlantic comparisons are continuously drawn. The authors of the first chapter consider public health, preventive medicine and professionalization, leaving the actual American educational experiments and institutions until later, and making reference to the now familiar connection between disease and town dwelling. To start with, medicine was seen as a political force for change but, in both countries, such an emphasis was soon eclipsed and replaced by the dominance of doctors' own interests. This first chapter should be read along with the third, by Dorothy Porter, on 'Stratification and its discontents', since both sections address the intra-professional antagonisms which have persistently dogged public health. Porter sees the long drawn out efforts of British public health doctors in terms of Freidson's analysis of status among the professions. At different stages the low prestige of this branch of medicine was marked by salary differentials or by lower eductaional requirements. In the main, the difficulty arose from the exclusion of these doctors from the distinguishing mark of 'true' physicians, namely their responsibility for patients. Porter maintains that the repeated failure of the professional caucus to control the aims, goals and practices of the entire group of public health doctors undermined their influence within the broader medical field.

The chapters by Arthur Viseltear and by Elizabeth Fee together describe the emergence of public health programmes and schools in the USA, a matter primarily of interest to historians of American medicine. The process demonstrated a steady move from social reform to applied science, with the eventual formation of large, independent, multidisciplinary institutions, which owed no allegiance to medicine. Occasional efforts to enact national health insurance, bringing curative and preventive medicine together into one national system, never succeeded. One consequence of this was to create an obstacle for those who tried to organise health services in developing countries where, 'although the concept of integration was invoked it could not be delivered'.

## CRITIQUES OF PUBLIC HEALTH

Jane Lewis is the most outspoken UK critic of recent developments in public health and she certainly does not mince her words as she reviews philosophy and practice in the 20th century. In her opinion, the association with medicine has always constituted a fatal flaw. Reviewing elements since the 1970s, she remarks how community medicine was originally attended with great optimism. Sir John Brotherston, for example, saw it as a natural extension of the old concern with the health of the group, the population as patients, as it were. But others, anxious to rid themselves of any contamination from the old, despised LA departments' officers, stressed value-free epidemiology as their distinguishing mark. The suggestion was that this represented a pure, new discipline, necessarily practised by doctors of course, but forever separate and distinct from both clinical medicine and primary care.

By the late 1980s the adjective 'community' was out of fashion, or had been adopted by undesirable associates. Accordingly, on the prompting of a new report on the public health function, by Sir Donald Acheson (brother of one of the authors of the book), the pure essence was once more redistilled and the name on the bottle correspondingly altered—back to Public Health, but with the word 'Medicine' studiously retained. The latest attempt to clarify the discipline has not yet, in Lewis's opinion, resolved the fundamental drawbacks of our system. For instance, doctors in primary care are undoubtedly also concerned with prevention, yet they are excluded.

Lewis's key contention is that the signal failure of both social medicine and community medicine to have an impact is because the promotion of health and the prevention of disease require a much larger stage than a subspeciality of medicine can ever provide. There is insufficient attention being paid to the multiple influences upon health and illness in the wider environment. Her case is well argued, as she reviews the historical process from before World War I to the present day. The story brings out, she declares, the persistent tendency for public health to define itself in terms of the narrow function it undertook at a particular time. One result of this has been a problem in recruitment, as prospective students have difficulty in descerning the key aims and objectives and in imagining what they are actually going to do. Even when there has been a broad vision, like that of Brotherston or Morris, the problem of realising it in practice has remained.

Whatever relics of a desire to improve the health of the whole population have still lingered on have meanwhile been vitiated by the lack of a distinct and exclusive body of knowledge. In its place has been an assortment of bits and pieces, tasks and goals which overlap with other disciplines and specialities and which are only linked in a bureaucratic sense. Of late, in face of the introduction of general management to the health service, public health doctors have even been shorn of any pretensions to management. Instead, they are conveniently reduced to epidemiological handmaidens or technicians, providing advice on health service needs. The newest definition (Acheson Report) of the public health function was couched in terms of prevention and health promotion but, within a service which is increasingly focussed upon curative medicine and the acute sector, public health practitioners face yet another split between the ideal and the real.



Both here and in America, Margot Jeffreys has long been a respected figure in medical sociology and she has enjoyed the trust of numerous public health academics. She with her colleague, Lashof, from Berkeley, California, offer, in the final chapter, a view of possible futures. They wonder whether changes likely to affect the mode of public health practice and the associated education are already discernible and whether there will be more international comparability in future. A subsidiary question concerns a matter raised earlier in this book, namely whether training inevitably has to respond to changes in tasks and roles or whether it should endeavour to give a lead.

The main public health challenges of today are familiar: environmental deterioration following upon increased productivity; the growth of an ageing, increasingly disabled population; a multiplicity of addictive substances; the expandion of genetic engineering; the appearance of new infections, the rapid pace of scientific discovery. As others have done, these authors reiterate UK and US differences in administrative arrangements. They see a great need for coming together, in both settings. With the USA apparently at last accepting the need for a better integrated system of health care there will be a demand for more physicians trained in epidemiology, economics and evaluative skills. So far there has been too much attention to life styles as the cause of disease, a neglect of regulatory policies to control harmful influences like the tobacco industry and a convenient inclination to ignore the effects of poverty. However, the authors do accept that an understanding of the causes of many chronic diseases can only come from population diagnosis, via epidemiology. Two essentials are, first, attention to the political process and, secondly, more interdisciplinary working.

In the UK, the disappointments following on the hopeful, 1972, creation of the Faculty are duly noted, together with the stresses brought about by the introduction of general management in the 1980's. Later, Sir Donald Acheson had tried to return the discipline to its old responsibility for communicable disease control.

This final chapter was written before the creation of the internal market in the NHS, so its conclusions are a little out of date. However, Jeffreys and Lashof insist that, here as in the States, the times demand a multidisciplinary profession. As things are at the moment, the 'non-commissioned officers' within public health in the UK feel downgraded, demeaned and, literally, undervalued. Schools of public health in this country are, they insist, not merely desirable but essential. Finally, they warn of serious consequences for the future health of the population as a whole if its traditional guardians continue to be decimated and disempowered.

THE END OF PUBLIC HEALTH?

Since this book was published significant changes have taken place in the NHS which have further modified the public health function. Public health physicians are employed by health authorities, that is to say by the purchasers of medical care, and they are supposedly providing expert advice on health needs to managers. They themselves are certainly no longer managers nor is their advice necessarily followed. The latest attempts to redefine their responsibilities (in the Abrams report) only serve to demonstrate the strictly limited list of matters with which these consultants are now concerned.

The ground narrows and footholds are uncertain. Even the information base, formerly such a distinctive feature of the national health service and a boon to epidemiologists in this country, is in danger of becoming less accessible with the establishment of self-governing hospital trusts and the encouragement of trust status among GPs. Competition does not encourage sharing.

Yet a moment's reflection reveals that more and more people, both medical and lay, are today involved in health issues, in the fields, for example, of microbiology, reproductive technology, housing, agriculture, energy policy and environmental control. There even exists a 'New Public Health' movement and a 'Healthy Cities' project, although neither owes allegiance to the Faculty. A major challenge both for this country and for the USA must therefore be how to focus all kinds of new knowledge and expertise so as to effect sound public policies for health and the common good. Who will design the public health scene in the twenty first century? It will have to be on a much larger scale than today's diminished specialists are permitted for their local plans.

Because of the relatively low standing of their predecessors. the most recent cohort of public health physicians are likely to be extremely jealous of their full consultant status. In the face of diminishing numbers, however, there are already faint signs that they may shortly be obliged to think the unthinkable and to contemplate coming together, in a spirit of ecumenicism, with non-medicals. If this happens, the strange subtitle of this intriguing book will be truly applicable.

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# THE WORLD SUMMIT ON MEDICAL EDUCATION

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The World Summit on Medical Education took place in Edinburgh on 8–12 August 1993, organised by the World Federation for Medical Education. The government reception by the Scottish Office, hosted by Lord Fraser of Carmyllie, was at the Royal College of Physicians. The precursor of the 1993 Summit was the WFME World Conference of 1988 which formulated the *Edinburgh Declaration*.[1] That conference identified the following 12 aims as the outcome of reform:

The provision of education in relevant settings
The basing of curricula on national health needs
The emphasis to be on disease prevention and health promotion
The establishment of lifelong learning
The basing of learning on competency
The training of teachers as educators
The integration of science with clinical practice
The selection of entrants for non-cognitive as well as intellectual attributes
The coordination of medical education with health care services
The achievement of balance in the production of different categories of medical practitioner
Training to be multiprofessional
Provision for continuing medical education

Reforms to these ends have been adopted in a number of medicals schools and found to be effective. The conservatism of the profession and the universities, and the complexities of the procedures involved in the production of the changes may be responsible for the slow response in the majority of medical schools.

*The 1993 summit*

The World Summit of 1993 faced new challenges to medical education arising out of global, social, and political change and new disease problems.[2] These include the increase in population in some countries; extensive shifts in national and regional political structures; economic recession; shrinking resources; wars and violence; the AIDS pandemic; the resurgence of diseases thought to be contained; health care systems in disarray, with costs rising out of control. Medical schools fall seriously short in their response to these challenges.

*The widening task of doctors*

Besides the promotion of health, the prevention and treatment of disease and the rehabilitation of the disabled, increasingly doctors have to learn to be better communicators. Among those qualified in medicine must now appear more critical thinkers, motivated life-long learners, information specialists, practitioners of applied economics, sociology, anthropology, epidemiology, and behavioural medicine; health team managers; and advocates for communities. These represent a greatly increased range of functions within the practice of medicine.

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