The BMA and science

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It should be no surprise that in a festschrift for a distinguished clinical scientist who has also been President of the BMA, there should be a contribution on the part played by the BMA in the advancement of medical science. What may surprise some readers, those who may have too closely identified their Association with the more pragmatic elements of its activities (such as the negotiation of terms and conditions of service), is the extent to which the Association has been and still is active in scientific matters. As Sir Christopher is also a medical historian of note, it may be appropriate to consider the past activities of the BMA in relation to medical science, before saying something of the ways in which it is continuing to fulfil that part of its responsibilities.

Even before there was a BMA, the Provincial Medical and Surgical Association (from which the BMA was to spring) included among its objectives the promotion of 'the medical and allied sciences'. Having observed that there might exist 'unsettled points which have subjected medicine to the imputation of being a conjectural art', they aspired 'to redeem its character and to give to its operations more precision and greater certainty'. If the authors of that prospectus were now to survey the medical scene 150 years later, they might consider that some progress had been made. But as sensible men they might protect themselves from hubris by observing the many challenges which still remain. For the progress of medical science, in solving or at least illuminating some problems, also uncovers others not previously capable of being formulated. The experience is like that of Ulysses—'All experience is an arch wherethrough/Gleams that untravelled world whose margin fades/For ever and for ever when I move.' Nor does the penumbra of pseudoscience lessen, even though it may change—phrenology may have waned, but aromatherapy has waxed.

In the first volume¹ of the *History of the British Medical Association*, which takes it from 1832 to 1932, Mr Muirhead Little outlined the various ways in which the Association had given effect to its acknowledged responsibility to advance medical science. Scientific papers at the Annual Meetings; dissemination of information through the *Journal* and associated publications; the appointment of Special Committees to consider and report on particular topics; 'collective investigations throughout

the general body of the profession': the award of scholarships, grants and prizes; and organised lectures centrally and locally – these are the modalities of action, and with various modifications they are still in being, with the exception of the 'collective investigation', with which in this historical section it may be appropriate to begin.

Collective investigations

The idea behind these endeavours was well expressed by Sir George Humphry in his Presidential Address² of 1880. 'Such work would prove one of the most powerful inducements to the cultivation of observation and thought respecting the mass of facts which are passing now too often unheeded or unnoticed before their eyes; and would lead, more than any other thing, to deepen their interest in the science of medicine, and to impart the charm of wider usefulness to the daily routine of life.' But when he came to consider concrete instances, he had to admit with sorrow that 'the work of cumulative observation, or accumulated data, has been too little attempted; or, if attempted, has been productive of too little result'; and, still more ruefully, 'The greater the force, the greater the waste, unless it be well applied.'

The scheme of advancing knowledge by directing enquiries to each member of a large and growing profession is perhaps no longer applicable, and has yielded place to more focussed investigations, some of which, however, such as controlled trials, may still involve a considerable number of participants. When the Association began, there may also have been the element of 'unripe time', for Farr and Galton were still to come, let alone Fisher and Bradford Hill. There was also no adequate focus within the Association for organising such enquiries – a defect recognised by Humphry in the same Address – 'Such a work, to be successful, must be undertaken in a careful, deliberate, systematic manner, with a view to its being carried on continuously and thoroughly, so as to ensure the confidence and enlist the sympathy and co-operation of the members. There must be a well paid secretary or registrar, who will devote himself with zeal and energy to the duty of organising a systematic enquiry, and will collate and codify the evidence and co-operate with a committee, a *medical investigation committee* and a *medical investigation*

secretary or registrar.' Perhaps after lengthy germination that seed may have contributed to the establishment first of a scientific committee and secretariat, and now the Board of Science and Education.

A subsidiary cause of the relative failure of the attempts at 'collective investigation' may have been the choice of topics for study by this means. That they were not always such as to arouse enthusiasm in the doctors to whom the enquiry was addressed may be exemplified by the enquiry in 1861 on 'the actions of medicines'. 'Schedules of questions on six selected subjects were sent out, but although the membership of the Association was then about 2,200, only 46 replies were received.'³ After the suggestion by Humphry a 'Collective Investigation Committee' was set up in 1881. Dr Mahomed of Guy's Hospital was the first secretary of the Committee, followed shortly by Dr Wilmot Herringham and Dr Isambard Owen. During its life of less than a decade, the Committee published rather diffuse reports, even including individual case histories, on topics as various as phthisis, syphilis, pneumonia, diphtheria, and rheumatism. There were also more general Reports on *Maladies of Old People*, and *The Connection of Disease with Habits of Intemperance*. But the Committee was wound up in 1889, Dr Carpenter having said in the 1888 Report that 'the fact was that they had been too ambitious, seeking to embrace too large an area and to obtain too much information at a time when members of the Association were not likely to adopt the suggestions made by the Committee.'

There was a revival of interest in the technique of 'collective investigation' in 1927,⁴ and moderately detailed questionnaires were compiled on The treatment of varicose ulceration and The after-history of gastro-enterostomy. Some information was obtained, and papers appeared in the *Journal*; but the major scientific activity of the Association has taken other courses. Complete failure shares with complete success the distinction of being extremely uncommon; and these noble attempts at distilling new scientific knowledge from collective experience may not only have produced some actual results, but may also have been a stimulus and example to other bodies better equipped for the task, notably the Registrar-General's Office, now known less picturesquely as the Office of Population Censuses and Surveys, or OPCS for short.

Dissemination of information

If there should be an element of doubt about the desirability or practicality of the Association engaging in original research on an in-house basis,

there can surely be none about the value of what it has done in the way of disseminating information, most notably over the years by the *Journal* and associated publications; but also through the Nuffield Library and the Department of Audiovisual Communication (formerly acronymised as BLAT, and now more euphoniously as BLITHE). The early history of the *Journal* and its predecessors is told in the first volume of the history of the BMA:¹ and is continued in the second volume, by Grey-Turner and Sutherland,⁵ including the important episode in 1956 when the then Editor fell foul of the gold-headed cane, was unsupported at first by the Council, but was vindicated at the Annual General Meeting, thereby establishing the important principle of editorial freedom.

Scientific aspects of medicine have been regularly considered by the Association, even before they were made an integral part of the Annual Meeting in 1865. At first there were four Scientific Sections, designated as Medicine, Physiology, Surgery, and Midwifery; but by 1932 the number of Sections had increased to 24, and the publication of their proceedings was becoming a problem. The amount of other necessary business had also increased, and the scientific part of the meeting began to be held on separate days, though in the same period as the Annual Representative Meeting (ARM). It was decided in 1957 to hold clinical meetings at a different time from the ARM; and from time to time scientific meetings are held overseas, often in conjunction with other medical organisations. One session during the ARM is still held as a clinical meeting in a local hospital.

Both for doctors and for the general public, a very important indication of the Association's concern with medical science and its application is given by the long series of published Reports. These are prepared, with professional assistance, by special committees or working parties set up to consider and report on a specific topic. The topics are not all exclusively 'scientific', and indeed there are few major scientific advances which do not entail ethical consequences for individuals and for society. It is therefore quite appropriate that the professional division within the BMA House which is responsible for the Board of Science is also concerned with the Central Ethical Committee. The first Special Committee, appointed in 1877, was concerned with chloroform and other anaesthetic agents. A Therapeutic Committee, set up in 1887, issued a Report in 1890, but remained in being, and in 1910 became a standing committee concerned with reform of the *Pharmacopeia*. This interest in practical therapeutics led in 1935 to a close liaison with the Pharmaceutical Society of Great Britain; and a joint committee of the two bodies produced the National Formulary, now

the *British National Formulary*, which has been published at shorter and shorter intervals, as a most useful sign of the intensity of the therapeutic revolution.

Between 1933 and 1980, 49 Reports of Special Committees were published, on a wide range of topics.⁴ Some dealt with largely clinical matters, such as miners' nystagmus, arthritis and coal-gas poisoning; but others with more general problems, such as traffic accidents, mental health, and the care of the elderly. There were no less than four Reports during the 30's on nutrition – at a time when the excitement of the vitamins had waned, and the unwelcome stimulus of wartime shortages had not yet appeared. Much credit is due for this, at a time when the teaching on nutrition given to medical students was largely limited to the dietetic management of particular diseases – and not necessarily wise dietetics, for Robert Platt was able to report florid scurvy in two patients who had followed too scrupulously the 'ulcer diet' prescribed for them. The first report on tobacco smoking came out in 1971, the same year as the second report from the Royal College of Physicians. Computing in general practice was the subject of a Report in 1980 – a topic which is casting long shadows ahead, as Donald Court said of childhood illness.

Some recent reports

During the 80's, a number of Reports from the BMA have aroused the interest of the general public as well as of doctors, and some have even proved controversial. These are the rewards and the penalties to be expected by any organisation which says positive things clearly on matters of general interest and importance. As examples of 'high-profile' Reports, I would mention those on the effects of nuclear war (The medical effects of nuclear war (1983); The long-term environmental and medical effects of nuclear war (1986); and Selection of casualties for treatment after nuclear attack (1988).) Also, the Reports on Alternative Therapy (1986); on Diet, nutrition and health (1986); on Deprivation and ill-health (1987); and on Euthanasia (1986). In view of the public interest attracted by some of these Reports, it may be worth while to say something on how they arise, how they are compiled, and how they achieve publication.

Many of the topics which form the basis of Reports are suggested at the Annual Representative Meeting (ARM) by Divisions of the BMA; or they may arise in discussions on the floor of the ARM. Others may be suggested by Council in the course of the year, between ARMs. These suggestions are referred to the Board of Science; and in addition the Board itself

or the Professional Division may initiate a topic. When a suitable topic has been identified, the Board sets up a Working Party. This consists of about a dozen members, generally but not always doctors, and including members of the Board. Appropriate experts from a range of relevant disciplines are invited to give evidence, written or oral; and this is considered by the Working Party in a series of meetings. The Report itself, however, is prepared (in what is not uncommonly a whole series of drafts) either in-house in the Professional Division, or by a commissioned expert. (For example, the very successful publication *Living with Risk* was written on commission by Dr Michael Henderson, but the project as a whole, which included a film, was directed by Dr John Dawson, Head of the Division; and the Editorial Secretariat (Hilary Curtis and Audrey Porter) and the Production (David Morgan) were members of the Division). When the Report is nearing completion it is submitted to the Board, who have to approve it before it goes to the Council of the BMA. The Report is presented to Council by the Chairman of the Board of Science (currently Sir Christopher Booth), who also has to reply to the debate. This is no mere formality, for a choice has to be made between alternative ways of publication. The result may be a Discussion Paper of the Board of Science (which more or less gently implies that the Board is out on its own limb); a Report of the Board of Science (which indicates either warmer approval or cooler disapproval); or a Report of the BMA (translation – there is enough credit for it to be worth sharing around). More seriously, this last category indicates that the particular Report combines broad general interest, and issues which go well beyond the purely scientific into ethical and political considerations.

Each of the Reports which I have mentioned deserves consideration in its own right, as well as by way of example. And in addition the BMA has responded to the clinical and scientific challenge of AIDS in a number of publications. There have also within the past decade been Reports on alcohol in relation to driving, and to young people; on the care of the elderly; on boxing; on surrogate motherhood; on torture; on smoking; on screening for cervical cancer; on medicines for developing countries; and on immunisation against hepatitis. But I would like to conclude with a brief indication of the line taken in three of the recent Reports which have proved controversial.

The Report on alternative therapy (1986) was not heavily criticised in Council, but on publication it received unfavourable comment from the media, as being unduly critical of the contribution made to the welfare of patients by the many varieties of 'comple-

mentary medicine', which is now the preferred term. Any measure which does good to patients by means which we do not necessarily understand must be 'a good thing'; but surely it must be better still if the mechanism can be understood, even if we are still very far from doing so over the infinite range of human ills. Declaring an interest as a member of the Working Party, I still think that we had a duty, both to present and to future patients, to suggest to them that before they embarked for the enchanted shores of alternative treatments they should first have satisfied themselves that the particular condition from which they were suffering was not among those which could be critically and favourably affected in its outcome by methods which had been scientifically assessed.

The Report on Deprivation and ill-health brought together – not for the first nor probably for the last time – the evidence which suggests that the less affluent members of our society are more likely to experience ill health. It included an element of speculation – for example, that 'Improvements in the standard and availability of housing would offer particular benefits for people on lower incomes'; and that 'Education is important in helping people to resolve problems of social disadvantage' . . . But the statements which I have quoted, and others like them, were thought to have political overtones, and the paper was issued only as a 'Discussion Paper'. It should be noted, however, that concern with such matters is not the exclusive preoccupation of those on the left of politics – in his time at the DHSS Sir Keith Joseph was much exercised over what he termed the 'cycle of deprivation'.

I was not directly involved in the BMA Report on euthanasia; but that does not in any way prevent me from expressing my warm approval of both the tone

and content of the document. Once again the media were critical, with yearnings for what goes on in the Low Countries, in the way of formalised quietus. The media delight in change; but my own belief is that the silent majority (though by definition I cannot prove it, nor on the other hand can it be easily contradicted) would prefer to associate their doctor with the preservation of their life, rather than with its premature destruction. There may of course be special cases – there always are – but they are not generally favoured as a ground of legal enactment.

I hope I may have managed to give some impression of the long standing, various, and productive involvement of the BMA in the scientific aspects of medicine. Among the many responsibilities which Sir Christopher Booth has shouldered with grace and distinction, he may find being Chairman of the Board of Science not the least enjoyable and rewarding.

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References

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- 2 Humphry GM. President's address. *Br Med J* 1880; ii: 241–4.
- 3 Anonymous. The British Medical Association and collective investigations. *Br Med J* (suppl) 31 December, 1927.
- 4 Anonymous. A new venture. *Br Med J* (suppl) 7 January, 1928.
- 5 Grey-Turner Elston, Sutherland FM. *History of the British Medical Association*, vol II, 1932–1981. London: British Medical Association, 1982.