Health services research: a case of need or special pleading?

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The publication of the *Research and Development Strategy for the National Health Service*[1,2] is welcome as it seeks to focus research on NHS priorities. The deficiencies in the present programme were identified most recently by the House of Lords select committee on science and technology in its report *Priorities in Medical Research*,[3] which criticised the lack of coherent arrangements for the NHS to articulate its research needs and to ensure that the benefits of research are systematically and effectively transferred into service.

Multidisciplinary nature of health services research

Health services research is defined by the Medical Research Council as: "the identification of the health care needs of communities and the study of the provision, effectiveness and use of health services." This excellent definition indicates the essential multidisciplinary nature of health services research—for example, who defines the health needs of communities? It seems inevitable that there would be disagreements between health care professionals, let alone those that might arise if the public joined the debate.[4] Issues of what health services are effective, and at what cost, introduce the disciplines of economics and statistics to the debate, and the use of health services raises issues of access, consumer satisfaction, and compliance and within that the consumer's perception of risk and benefit. Health services research is necessarily multidisciplinary.

Ensuring success

The success of the NHS research and development programme will depend on a well trained workforce; a corollary of this is the provision of appropriate training in research methods. These issues will need to be addressed by medical schools and other institutions with responsibility for training.[1] Recently the heads of academic departments of public health medicine in the United Kingdom undertook reviews of staffing within their departments. The table shows the results. The 84 consultant grade academic staff have honorary contract responsibilities, educational and research responsibilities, and interests outside health services research; therefore medical academic whole time equivalents available for health services research are lower than might be immediately apparent. The data also show the wide range of disciplines other than medicine within academic public health, some 13 disciplines being represented among 59 non-medical, non-statistical academic staff in 24 medical schools.

Staffing in the social and behavioural sciences is less than one post in each department. The total of five lecturers in psychology may indicate that it is more usual for them to be located in departments of psychiatry, but if so their research is probably clinical or experimental rather than health services research. At present there are 3·5 health economists in the academic departments of public health, with an additional vacant senior lecturer post. Recruitment is particularly difficult as the financial rewards in the private sector are far greater than those offered by universities. The conclusion from these data must be that if the medical schools are to provide training in the multidisciplinary research methods of health services research then the staff infrastructure of the medical schools will need to be enhanced.

*Academic posts in medical school departments of academic public health medicine in the United Kingdom, 1991**

Type of staff and subject	Grade: Professor	Grade: Senior lecturer or reader	Grade: Lecturer	Total
Medical staff	25·0	58·2	38·0	121·2
Non-medical staff:				
Statistics	2·0	15·0	19·1	36·1
Behavioural and social sciences	0	10·5	12·5	23·0
Psychology		2·0	3·0	5·0
Sociology		5·5	6·0	11·5
Health economics		3·0	1·5	4·5
Demography and anthropology		0	2·0	2·0
All other staff†	3·0	15·3	17·4	35·7

*For 24/27 medical schools, excluding St Bartholomew's, University College Hospital and Middlesex, and Westminster and Charing Cross medical schools, which did not reply.
†Includes health promotion and education, epidemiology, nutrition, occupational health, medical audit, environmental health, and health services research.

Training programmes

UNITED STATES

In the United States training programmes for health services research have existed for more than 25 years, and there are so many that the Association for Health Services Research, together with the programme on health systems research and development of the World Health Organisation, has felt it necessary to produce a directory of training programmes, which lists some 125 postgraduate programmes within the United States and 36 elsewhere.[5] The directory probably underestimates the size of the endeavour as it underrepresents nursing and dentistry. Funding for attendance is available through various sources. The Robert Wood Johnson clinical scholars programme has trained more than 30 clinicians a year over the past 20 years and is said to have created the basis of "outcomes research" in the United States. Other funding programmes in the United States are dedicated to social scientists with, for example, the Pew health policy programme supporting 30 students each year. Finally, special funding for health service research units or centres is seen as necessary in the United States for at least two reasons. Firstly, there is no large constituency to support health services research as its results have previously criticised the behaviour of particular professional groups[6]—for example, surgeons are unlikely to applaud the suggestion that they perform unnecessary surgery. Secondly, resources for staff are scarce, and some

professionals may move to the more lucrative private health sector. It is essential therefore to establish and nurture units and centres with a multidisciplinary base and reasonable tenure. To do this the United States federal government has funded through the Agency for Health Care Policy and Research 10 to 15 centres of excellence for health services research. In contrast, in Britain there is a tendency to run down and disestablish health services research units in favour of grants for individual programmes and projects.

UNITED KINGDOM

The efforts of the Medical Research Council in training have been more modest. Three special training fellowships in health services research have been awarded each year for the past two years. Among the advanced course studentships, three or four each year go to MSc programmes in medical statistics. Other young graduates who finally work in health services research may of course receive support from other parts of the council's training programme. For example, this year there will be nine MSc places on epidemiology or statistics courses, or both. The Wellcome Trust has recently begun to support training in health services research with one or two posts each year. The position in the United Kingdom is perhaps best summarised by the secretary of the council of the Medical Research Council during a visit to the United States at the end of 1991, who reported that "it seems the USA is taking training and manpower very seriously; the UK would do well to follow suit."

If an infrastructure in health services research is to develop, additional resources for multidisciplinary research will be needed. Additionally, the whole process of medical education needs to be infused with the behavioural and social sciences disciplines not only for the research and development strategy but also for the changes in medical education proposed by the General Medical Council (consultation document, 1991).

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2 Peckham M. Research and development for the National Health Service. *Lancet* 1991;338:367-71.
3 House of Lords Select Committee on Science and Technology. *Priorities in medical research*. Vol 1. London: HMSO, 1988.
4 Dixon J, Welsh HG. Priority setting: lessons from Oregon. *Lancet* 1991;337: 891-4.
5 Foundation for Health Services Research. Directory of training programmes in health services research, 1991-2. (Available from Foundation for Health Services Research, 1350 Connecticut Avenue, NW, Suite 1100, Washington, DC 20036.)
6 Mechanic D. Prospects and problems in health services research. *Milbank Q* 1978;No 2.

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Hammersmith Staff Rounds

Postinfectious myocarditis

Still a largely clinical diagnosis

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Patients with post-infectious myocarditis may present with unexplained heart failure or arrhythmia and fever. There is no universally accepted definition of this condition, although the Dallas classification has helped to establish firm histopathological criteria for diagnosis.[1] We present a case of probable coxsackie B myocarditis which illustrates some of the controversies surrounding this disease.

Case history

A 30 year old man developed shoulder pain, sharp retrosternal chest pain, a dry cough, and a sore throat seven weeks before admission to hospital. He subsequently noticed progressive breathlessness on exertion; by the day of admission he could walk no more than 18 m on the flat. He had no history of orthopnoea and ankle swelling or palpitations. Four days before admission a painful swelling had developed on the left side of his neck. His medical history was unremarkable. He smoked 20 cigarettes a day, took no prescribed drugs, and had not been abroad recently.

On examination he was unwell, dyspnoeic at rest, and flushed but afebrile. No signs of endocarditis or vasculitis and no superficial lymphadenopathy were evident but he had fullness of the left supraclavicular fossa. He had a high arched palate but no other features of Marfan syndrome. He had a sinus tachycardia of 100 beats per minute and a blood pressure of 100/70 mm Hg. His venous pressure was raised at 8 cm above the manubriosternal angle and the apex beat was laterally displaced and diffuse. Auscultation showed third and fourth heart sounds but no murmur and no rub. All pulses were palpable, and he had no peripheral oedema. Respiratory examination showed bilateral basal inspiratory crackles. Abdominal and neurological examination gave normal results.

On the night of admission he developed swelling of the whole of the left arm and distension of the superficial veins. The main clinical diagnosis was myocarditis, but in view of the probable left subclavian vein thrombosis we considered other causes.

Investigations showed he had normochromic normocytic anaemia with a haemoglobin concentration of 101 g/l. Peripheral blood leucocyte count was normal at $10{\cdot}8\times10^9$/l. His platelet count was raised at 708×10^{12}/l. A blood film showed thrombocytosis, anisocytosis, and some rouleaux but no nucleated red cells. The erythrocyte sedimentation rate was 102 mm in the first hour, and C reactive protein concentration was 195 mg/l (normal 0-10 mg/l). His biochemical profile, including creatinine kinase concentration and thyroid function tests, was normal. Repeated blood cultures were sterile. A Paul-Bunnel test for infectious mononucleosis and latex and dye tests for toxoplasmosis gave negative results. The electrocardiogram showed extensive T wave inversion over the inferior and precordial leads. Chest radiography showed cardiomegaly, blunting of both costophrenic angles due to small pleural effusions, and septal lines in both lower zones (fig 1).

He was treated with bed rest, intravenous heparin to produce full anticoagulation, oral diuretics, and a single daily dose of 75 mg oral aspirin. During admission further investigations were done as follows.

Cardiac structure and function—An echocardiogram showed normal valves. The right and left ventricles showed hypokinesis of the free wall and the right ventricle was dilated. Invasive study of the heart was deferred for four weeks, and by then his clinical state