

many consultants feel.<sup>4</sup> They argue that different consultants should do different things, suggesting not only that some consultants should specialise in teaching or management but also that some might specialise in acute work and others in elective work, some in outpatients and some in inpatients.

One fear undermining such specialisation, however, is the fear of engendering second class consultants. Currently consultants differ in pay, workload, on call responsibilities, and teaching commitments, and last week's conference couldn't agree whether it mattered whether consultants did very different things, so long as they had clinical responsibility for individual patients.

If consultants remain wary of formal appraisals those at last week's meeting seemed much more comfortable with the concept of peer review as outlined by Brian Harrison of the British Thoracic Society. The society has a voluntary scheme whereby two reviewers visit each department and review and report on the facilities and organisation of the service. Responses from both the reviewers and reviewed have been almost uniformly positive. Schemes like this, and the already well established accreditation scheme for pathology departments, will undoubtedly grow and help to contribute to the maintenance of standards and the cross fertilisation of ideas. Clinicians also like these schemes because they cross the organisational barriers imposed by the internal market and the resulting competition between trusts.

But trusts and their aims cannot be ignored in today's health service. Thinking about the aims of the trust seems alien to many doctors—partly because of their “professional duty to the individual patients”<sup>3</sup>; partly because they didn't have to do it through the first 43 years of the NHS (and aren't

trained to do it); and partly because of the crude way that some trusts have developed their organisational goals, excluding rather than engaging consultants in the process. Bailey points out that the current multiplicity of ways in which consultants can theoretically influence a trust's policy serves to confuse and that trusts need to evolve more effective ways of allowing consultants to influence and implement trusts' policies.<sup>2</sup> He points to Sweden, where the chiefs of the clinical services sit on hospital boards.

Developing a service (and a career) in line with a trust's aims shouldn't be a problem for consultants if, firstly, those aims are directed towards serving the hospital's patients and, secondly, those consultants have played a strong enough part in the process of evolving these aims. Consultants might feel beleaguered at the moment, but there are few people (even among their critics) who do not want to see them fully engaged in making the health service work—not just clinically but strategically and managerially. And that means, firstly, that they have to manage themselves and their colleagues more than they have been used to.

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## Tuberculosis: old reasons for a new increase?

### *Socioeconomic deprivation threatens tuberculosis control*

See pp 963, 967, 974

Notifications of tuberculosis have increased in England and Wales over the past few years, as in other European countries and the United States.<sup>1-3</sup> An estimated 8000 extra cases occurred between 1982 and 1993 in England and Wales, but the 95% confidence interval is wide (3000 to 12 000).<sup>1</sup> At least part of the increase may be an artefact—for example, the creation of consultants in communicable disease control in 1988, together with local initiatives (such as that described by Brown and colleagues (p 974),<sup>4</sup> may have resulted in a substantial fall in the undernotification previously reported in several areas.<sup>5</sup> The increase in notifications has been largely for non-respiratory tuberculosis,<sup>1</sup> in which the new consultants may have had their biggest impact—undernotification is more likely in specialties other than respiratory medicine. On the other hand, evidence exists that undernotification of tuberculosis, particularly in association with HIV infection, is still common.<sup>6</sup>

Factors contributing to a real increase are likely to be multiple and may vary among areas and populations. Notifications of tuberculosis in Britain fell steadily long before specific chemotherapy was available. It was recognised in 1899 that “the most powerful factors in producing tuberculosis are—(1) air contaminated by the so-called tubercle bacillus, (2) food inadequate in purity, quality and quantity, (3) confined and overcrowded dwellings, (4) a low state of general health and resisting power of the body.”<sup>7</sup> The fall was attributed primarily to improved socioeconomic conditions

and the isolation of infectious cases. Temporary increases in tuberculosis associated with wars were explained by poor nutrition, overcrowding, and fewer beds in sanatoriums.<sup>8</sup> The continued fall after effective treatment was introduced was slowed but not reversed by the arrival of immigrants from countries with a high prevalence of tuberculosis.<sup>9</sup> Much higher rates, particularly in the Indian, Pakistani, and Bangladeshi ethnic groups, have been documented on several occasions over the past 30 years.<sup>10-12</sup> The increase in notifications since 1988 is of particular concern as it seems that immigration may not be the only factor and indeed may not be the most important one in some areas. The papers from Mangtani *et al* (p 963)<sup>13</sup> and Bhatti *et al* (p 967)<sup>14</sup> in this week's journal indicate that socioeconomic deprivation may also be important. Nevertheless, disentangling the effects of deprivation from those of belonging to an ethnic minority on the incidence of tuberculosis is almost impossible.

Unsurprisingly, in the 32 London boroughs tuberculosis is associated with unemployment and immigration; of more concern may be the association between recent increases in both tuberculosis and unemployment.<sup>13</sup> In Britain the greatest increases in tuberculosis between 1980 and 1992 occurred in the poorest 10% of the population (on the basis of the Jarman index). In this group notifications increased by 35% compared with a national increase of 12%. Indeed, an increase occurred only in the poorest 30% of the population. The increase in the borough of Hackney (with a rate four

times the national average and an increase from 172 cases in 1986-8 to 305 in 1991-3) was not limited to new immigrant groups and refugees, although they accounted for almost half of the excess cases.

### Homelessness increases risk

Poverty, unemployment, and homelessness are inextricably linked, and all increase the risk of tuberculosis. Because of the difficulties of management, particularly in homeless people, drug resistance may become more common. Recent surveys of single homeless people in London carried out by Crisis showed that 2% of people living in hostels or using day centres had active tuberculosis.<sup>15</sup> Of further concern is the increasing number of young homeless people, which is relevant to any future decisions about the BCG programme in England and Wales.

In the United States HIV infection is undoubtedly the most important cause of the increase in tuberculosis, but the breakdown of tuberculosis control programmes is a contributory factor. In Britain, HIV infection seems to have had a relatively small impact on tuberculosis.<sup>16</sup> If the epidemic of HIV infection in India increases this will inevitably increase the overlap between HIV infection and tuberculosis in immigrant groups in Britain. Currently among immigrants such an overlap is limited largely to those from sub-Saharan Africa.

Since the introduction of the NHS internal market concern has been expressed that the systems for controlling tuberculosis, which have so far been largely successful, will not be adequately maintained at a time when they need to be strengthened. As Bhatti and colleagues comment, however,

this may not be as important as reversing the underlying fall in real income among the poorest section of the population. The failure to reduce tuberculosis in most developing countries in spite of the availability of effective chemotherapy has been attributed to the failure to improve socioeconomic conditions, and the evidence from Britain supports this.

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## Promoting cost effective prescribing

### Britain lags behind

In many countries the cost effectiveness of drugs is receiving increasing attention. Rising budgets have heightened concerns about containing costs and whether resources are used efficiently.<sup>1</sup> The need for rigorous examination of cost effectiveness as well as clinical effectiveness has been argued for.<sup>2-4</sup> The message is clear: doctors may prescribe an effective drug to patients who will benefit, but if the drug is not cost effective they may be using resources that would produce greater benefit for other patients for the same cost.

Expensive drugs require the use of limited resources, which, once deployed are not available for other activities that may bring greater benefits for patients. When an expensive drug is shown to be cost effective, however, its use is justified by the additional benefits it brings. To use scarce resources efficiently the careful and explicit measurement of the value of what is given up (the opportunity cost) and the value of what is gained (for example, improvements in the length and quality of life) is essential. The measurement of cost alone or effectiveness alone will produce inefficiency as a rational health care system finances expensive alternatives to existing treatments only if these bring additional benefits commensurate with the cost.

The pharmaceutical industry has been quick to realise the potential of economic analyses in promoting new and expensive products.<sup>5</sup> Governments have also recognised the importance of economic analyses in their attempts to

contain costs and promote more efficient use of resources.

Data on the clinical effectiveness of interventions are limited and often of poor quality.<sup>6,7</sup> Economic analyses frequently base their results on individual trials of questionable quality or based on unrepresentative subgroups of patients<sup>5</sup> rather than on systematic overviews of evidence from all available trials.<sup>8</sup> When evidence from trials is lacking, economic analyses frequently extrapolate from weak evidence such as observational studies or assumptions made by panels of clinical experts, producing results that are less likely to be reliable.<sup>9-11</sup>

Published economic analyses are frequently contentious,<sup>5,12-14</sup> especially when vested interests are challenged. Drug companies have been criticised for using economic analyses as marketing devices rather than serious scientific research.<sup>15</sup> Similarly, those working for the funders of health services have been criticised for favouring the containment of costs at the expense of benefits for patients.<sup>16</sup> How can this situation be resolved for the benefit of patients and society as a whole?

For two years Australia has required pharmaceutical manufacturers to submit economic analyses in support of requests for the listing of new products in the schedule of pharmaceutical benefits. These submissions have to comply with guidelines published by the federal government.<sup>17</sup> The schedule is a "positive list" of about 550 drugs subsidised by