will always be committees whose performance is suboptimal.¹⁰ True, the departmental circular does go slightly further. It requires health authorities to: establish local committees with agreed working methods, ensure that all research protocols are submitted to them, and maintain a register and publish an annual report, available for public inspection. Yet the succeeding section on the administrative framework is little more specific than previous recommendations and the whole document is coy about how these provisions are to be enforced.

One gain from reviewing the history of ethics committees is the reminder of the differences between practice in Britain and in the United States. Here ethical review has always been voluntary; in the United States it has for long been a federal legal requirement, done mostly by institutional review boards.^{5 16} Interestingly, 30 years ago Pappworth contended that voluntary control would not work, since it had never succeeded before—a view initially opposed by the formidable Oxford professor, Leslie Witts, but later supported by him.¹⁷⁻¹⁹ Nevertheless, the American system has apparently produced a vast bureaucracy and thoughtful critics have suggested a semiofficial system instead-such as the two tiered system in Denmark, with central and regional committees on which there are equal numbers of lay and scientific representatives.^{10 20} But even in Denmark a commission has now been set up to consider the legal basis of controlling research, and in New Zealand sweeping changes have recently been proposed which will move practice there away from that in Britain and nearer to that in the United States.²¹

There is, then, a good case for monitoring the structure, process, and outcome of ethics committees, with sanctions against those who fail to keep to agreed standards. But what is the evidence that British laissez-faire has done any harm? To be sure, this is mostly indirect, but three examples are cogent. The worst occurred at the National Women's Hospital in Auckland (where the British system of approving projects was used).22 23 Here women were unknowingly entered into a study of the treatment of in situ carcinoma of the cervix; the outcome for most was adequate (although they were not managed by generally accepted standards), but a minority suffered persistent disease, developed invasive cancer, and in some cases died. The inquiry by Judge Sylvia Cartwright found that the research protocol should probably not have been accepted at the outset; consent should have been sought; the study was not monitored adequately; and the concerns of other doctors were not acted on. The second, British example is the recent case of Sharp and Sultan, who used "adoptive immunotherapy" for patients with AIDS; the London Bridge Hospital, a private institution, had no ethics committee, and its medical advisory committee simply accepted Sharp's claims to have scientific and ethical backing for what he was doing.²⁴ The third indication for disquiet is the wide variation in approval rates found in Britain, which must imply that some projects get less than adequate attention. Rates for proposals without any changes requested ranged from 90% to 61% in different centres and even more sharply according to whether a nurse was a member of the committee: a mean of 65% of all committees without a nurse approved all proposals unchanged but this proportion fell to 30% when a nurse was a member.10

The BMA has long called for a national ethics committee to be set up.25 Its task would not be to take individual decisions, though it might in exceptional cases - such as over multicentre trials-but to ensure that the workings of local ethics committees are standardised and monitored as well as running training courses for their members. Above all, however, it would be highly visible, meeting the growing public demand for candour—an aspect that Baroness Warnock considers

particularly important.14 Though its remit was not spelt out, rumour has it that a few years ago a serious attempt to set up a national committee was made by civil servants in the Cabinet Office, but the idea was squashed.²⁶ The profession should be warned that time is not on its side. Some representative forum concerned with standards of practice (such as the Conference of Medical Royal Colleges and Faculties) should look into the matter urgently, particularly the most difficult question of all: what sanctions-legal, financial, or professional (such as reporting to the GMC)—can be applied to those members of a local committee which is flouting agreed standards of practice? STEPHEN LOCK

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Adult polycystic kidney disease

Many advances in diagnosis, assessment, and counselling

The outlook for patients with adult polycystic kidney disease has changed radically now that treatment is widely available for renal failure. Less well recognised is the impact on their management of the use of high quality ultrasound scanning and flanking gene markers, which permit early, accurate diagnosis.

The sensitivity of detection of adult polycystic kidney disease by ultrasound scanning is around 22% in children under the age of 10, 68% in those aged 11-20, and 86% in the 20-30 age group.¹ The low rate of detection in the younger age groups reflects the slow development of renal cysts. Technical improvements in scanning will probably further increase the sensitivity of ultrasound scanning, but the distinction between mild adult polycystic kidney disease and simple cysts will remain a problem.

The major advance in the genetic aspects has been the finding that markers close to the α globin locus are linked with adult polycystic kidney disease. The responsible gene has been localised to the short arm of chromosome 16 in most families, and this is type 1 disease.² Initial studies suggested that there was no genetic heterogeneity,³ but a few families have now been identified in whom there is no linkage to chromosome 16 markers; this is type 2 adult polycystic kidney disease.4 Even in these cases, however, the use of recently developed flanking gene markers has made it possible to predict the presence of the condition with greater than 95% confidence in families with an appropriate pedigree structure.

In young patients without symptoms the main clinical problem is to detect the onset of hypertension, which often occurs well before the development of renal impairment. The risk of renal failure usually becomes important only in older patients. Patients and their families may-understandablyfind some difficulty in integrating all the information about genetics, asymptomatic hypertension, renal failure, and other complications of the condition. Indeed, a survey of the knowledge and attitudes of affected patients in Edinburgh showed much confusion and misunderstanding.⁵

Counselling needs to be improved if the patients are to be able to understand their condition and make informed decisions. The advice can be integrated with improved assessment and follow up of patients and their families.

In our own unit most patients aged over 18 undergo ultrasound scanning as part of an initial assessment, but preferably only after they have received education and counselling. The first step is an interview during which the background to the condition is explained. Patients are then shown a locally made video that explains the inheritance of the condition and the possible use of genetic markers for early diagnosis, as well as other aspects. Particular attention is given to ensuring that patients understand both the advantages and disadvantages of an early diagnosis. For example, a positive diagnosis may well create difficulty for those seeking employment—on the mistaken assumption that high morbidity is inevitable. Life assurance premiums will also be loaded, increasing the financial pressure on a group of patients who are already financially disadvantaged.6 Some may not wish to suffer the anxiety over the future that may be associated with a positive diagnosis. On the other hand, awareness of the diagnosis makes regular follow up possible and this facilitates the prevention of complications.

The long natural course of the disorder and the number of patients affected (around one in 1000 of the population⁷) make effective follow up depend on close cooperation among the genetic counsellors, the medical renal unit, and the primary care services. For example, annual checks on blood pressure and renal function may be undertaken by the patients' general practitioners. Unaffected relatives under the age of 30 should be followed up in the same way, though at less frequent intervals, because ultrasound scanning may fail to detect the disease in 15% or more of gene carriers in this age group. Over 400 patients are now being followed in this way in Edinburgh.

A positive diagnosis is technically feasible early in life, but the potential disadvantages are such that only in very rare instances need the diagnosis be confirmed in those aged under 18. Parental curiosity to know the diagnosis may not be in the best long term interests of the child, and monitoring blood pressure and renal function may be all that is required until the age of 18 or more for those "at risk." In our view routine genetic screening is therefore unnecessary.

The availability of a method for antenatal diagnosis raises other ethical problems. Though many patients are keen to know whether their fetus is affected, few would consider termination of pregnancy on the basis of such information. Prenatal diagnosis seems likely to be limited to those families with particularly severe difficulties, and even then should be undertaken only after extensive counselling about the problem.

The availability of DNA markers and high quality ultra-

sonography for the diagnosis of adult polycystic kidney disease have not, therefore, made any great difference to clinical practice, but they have certainly sharpened awareness of potential ethical problems. The main hope for the future must be that identification of the gene or genes responsible may lead to an understanding of the pathogenesis of the condition and so to the development of more specific treatment. The emphasis at present must remain on diagnosis using ultrasound scanning at an appropriate age, careful counselling of families, and detailed follow up; genetic studies should be limited to those with clear indications.

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HIV infection and tuberculosis

Consider tuberculosis in patients with AIDS

In the United States the epidemic of HIV infection has been blamed for the recent increase in tuberculosis from some areas because these increases have occurred among groups in which AIDS is also concentrated.¹² In Africa too, increases in tuberculosis have been reported from areas with high prevalences of both tuberculosis and HIV infection.³ What is the connection between HIV infection and tuberculosis? Do the American findings have implications for Britain?

Studies in New York city showed that among patients with both tuberculosis and AIDS almost two thirds had developed tuberculosis within six months of their diagnosis of AIDS (E Laroone et al, International Conference on AIDS, Montreal, 1989).⁴ Tuberculosis preceded the conditions that make up AIDS⁵ by a median of two months, and similar findings have been reported from other studies.64 HIV infection is a cofactor with one of the highest risk ratios for the development of tuberculosis in people already infected with Mycobacterium tuberculosis.⁹

Strong evidence that in people infected with HIV tuberculosis develops from the reactivation of a latent tuberculous infection comes from a follow up study of a cohort of injecting drug users whose tuberculin and HIV state was known.¹⁰ Some 14% of those seropositive for HIV and with prior tuberculin sensitivity developed tuberculosis compared with only 0.3% of those seropositive for HIV but without tuberculin sensitivity. Rates of tuberculin conversion during follow up