does improve vision; whether the improvement is worth the cost district health authorities will have to decide for themselves.

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Bile duct stones and laparoscopic cholecystectomy

SIR,—We wish to respond to some of the points that correspondents have raised since our editorial on bile duct stones and laparoscopic cholecystectomy.¹

We do not accept the views of Colin Ainley and colleagues, who, based on outdated reports, state that intravenous cholangiography should not now be used and suggest that most radiologists should be allowed to speak for themselves.² Indeed, in addition to the studies we cited, B R Tulloh and colleagues and Fred J Mullan and S Terence Irwin put forward strong arguments advocating the preferential use of intravenous cholangiography,² and a recently published study also indicates that intravenous cholangiography is as good as intra-operative cholangiography.³ We accept that some surgeons may wish to adopt selective preoperative intravenous cholangiography² and that such a policy has some defined advantages.

We attempted to adopt an unbiased view about the treatment of bile duct stones (surgery or endoscopy), and we accept that the arguments are finely balanced. But the four papers cited to support Ainley and colleagues' argument in favour of preoperative endoscopic sphincterotomy betray them. Indeed, one of these papers concluded that the role of endoscopic sphincterotomy alone as the initial treatment for patients was not established.⁴ All of the clinical studies quoted are non-randomised and retrospective. Either criteria for selecting surgery are not clear or operative exploration of the common bile duct was reserved for patients in whom endoscopic retrieval of ductal stones had failed.

Only two randomised studies have addressed this issue. The study we quoted by Neoptolemos *et al* had a morbidity of 16.4% in patients treated endoscopically compared with 8.5% in those treated by surgical clearance of the duct.⁵ Stain *et al* found low complication rates in both of their groups, but the severity of the major complications was greater with endoscopic sphincterotomy.⁶ The results of this study did "not support preoperative endoscopic sphincterotomy as a technique for the clearance of the common bile duct of stones on the basis of efficacy, morbidity rate or cost."

We are pleased that Ainley and colleagues recognise the surgical and radiological skill in biliary disease at Hammersmith Hospital. Endoscopic retrograde cholangiopancreatography and interventional endoscopy have also been used at this hospital since 1979, with the advantage of them being performed by surgeons. This has enabled us to make rational decisions on the best treatment option for individual patients, independent of the sort of interspecialty rivalry illustrated in Ainley and colleagues' letter.

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The EPIC study

SIR,—The EPIC Study Advisory Committee wishes to draw the attention of all specialists in intensive care to the European prevalence of infection in intensive care (EPIC) study (funded by Roussel Uclaf as part of its commitment to the control and management of hospital infection); the committee urges all intensive care units to participate in this study on 29 April.

Nosocomial infections in intensive care units have a considerable effect on morbidity and mortality and also result in major economic costs. In 1989 the average cost associated with a nosocomial infection was estimated at \$1800.¹ More recently, in Switzerland hospital infection has been estimated to cost Sw fr 100-300m a year.² To address the issue of nosocomial infection with specific reference to patients in intensive care units the EPIC Study Advisory Committee was formed with 17 members from western Europe, who realised that a study of this scale was required to provide data for assessing future infection control procedures in western Europe. The study, a one day point prevalence survey, will be the largest of its kind, and this will be the first time that the prevalence of infection in intensive care units has been related to the severity of illness of the patient on admission, combined with an assessment of the adequacy of treatment with respect to survival. The results should provide many new insights into the pattern of infection in susceptible patients and the probable impact on prognosis.

Comprehensive participation by intensive care units is important to ensure that the results are as representative as possible. For further information please write to the EPIC study coordinator, Medical Action Communications, Action International House, Crabtree Office Village, Eversley Way, Thorpe, Egham, Surrey TW20 8RY, United Kingdom (fax 0784 431323). Units already registered will receive information automatically.

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Auditing audits

SIR,—Oxfordshire Medical Audit Advisory Group discusses auditing audits.¹ In Kirklees all the members of the medical audit advisory group act as general practice audit facilitators and we employ an audit facilitator. With a relatively large number of people visiting practices and collecting data on audit activity we needed to standardise our impressions of the level of audit in the practices. Thus we required a tool to allow us to provide an assessment of audit in a practice that was precise enough to allow for our accountability to the family health services authority while maintaining confidentiality as required in the health circular HC(FP)(90)8. We

also required a tool that allowed us to measure our effectiveness in facilitating audit in general practices and to provide practices with an easily understood assessment of where they stand in developing audit compared with the rest of the practices in the area.

Kirklees Medical Audit Advisory Group advocates an audit cycle from the bottom up, starting with identifying a problem or topic, looking at what is happening, setting standards, and then making changes. The group also advocates that all members of the practice and primary health care team should be concerned in audit. Thus the group developed a simple stepwise 10 point scale against which the level of audit activity in a practice could be measured. Scoring a practice requires a yes/no answer at each point on the scale (box). We recommend this system of audit to others looking at audit activity.

Ten steps to audit

- 1 Practices not collecting data
- 2 Practices that collect data sufficient to meet annual report criteria
- 3 Practices collecting data over and above annual report criteria
- 4 Practices that have identified a problem
- 5 Practices that have identified a problem and started audit
- 6 Practices that have completed an audit that did not involve the full practice team
- 7 Practices that have completed an audit that involved the full practice team
- 8 Practices that have completed several audits, not involving the full practice team
- 9 Practices that have completed several audits involving the full practice team
- 10 Practices with a rolling programme of audit involving all members of the primary health care team

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1 Derry J, Lawrence M, Griew K, Anderson J, Humphreys J, Pandher KS. Auditing audits: the methods of Oxfordshire Medical Audit Advisory Group. *BMJ* 1991;303:1247-9. (16 November.)

Lessons of Chernobyl

SIR,—The findings of the International Atomic Energy Authority on the Chernobyl disaster should be treated with caution.^{1,2} Other studies have shown an increase in thyroid disease and congenital malformations in Byelorussia after the disaster.^{3,4} Moreover, the epidemiological framework of the International Atomic Energy Authority's study is questionable for several reasons.

The sample of villages was not chosen randomly, and the total sample size was under 1700, which was too small to detect any increase in diseases normally occurring in less than 10% of the population. In many of the studies the total sample size was only 500 and in some under 30. The control villages were selected from areas very near the contaminated zones (as close as 10 km); this was a serious flaw. These villages would also have experienced radioactive contamination from the food chain, and the contamination in the external environment would have been higher than elsewhere. Despite these facts the methodology of the study relied on showing differences between the control and contaminated zones, and the location of the controls may therefore have seriously biased the result.

The study did not attempt to follow up the substantial number of people who had moved away

from the area. Moreover, data from Soviet studies based on much larger samples⁴ or the total population⁵ seem to have been arbitrarily dismissed. One of the most perturbing aspects of the published summary is the elimination of the estimates of increased incidences of cancer and leukaemia found in the original technical report. As the incidence of leukaemia is increasing rapidly and has now reached west European levels this omission raises some serious questions as to why this action was taken.

Clearly, future studies should contain sufficient numbers; be conducted prospectively over at least 20 years with reports at regular intervals; follow accepted standards of epidemiological investigation; and publicise the results in full for evaluation by the scientific community throughout the world. Future work should be undertaken by an independent body.

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Urinary incontinence

SIR,—James O'Brien and colleagues found in a survey that 30% of patients with regular urinary incontinence who have discussed this problem with their general practitioner report having never received any form of assessment.¹ The authors express concern that, if their findings are representative of the situation in other health districts, a large burden of treatable unmet need exists.

Because of concern that some community services were being underused we undertook an anonymous postal survey of general practitioners in our district in June 1989. We received replies from 101 practitioners, of whom 42 reported never having used the continence advisory service for any of their elderly (aged >65) patients. Given the prevalence of urinary incontinence in the population aged 65 and over reported by O'Brien and colleagues (16.0% in women and 13.3% in men), it seems unlikely that a lack of any suitable patients would account for this. Our findings suggest, furthermore, that difficulty in obtaining the service is unlikely to be a major explanation for never referring patients: two general practitioners reported usually or always having difficulty in referring to the service, 21 reported occasionally having difficulty, and 36 never had difficulty.

This non-referral to the continence advisory service is surprising, given that the service, led by a trained nurse continence adviser, has been well established and widely advertised for several years and is directly accessible to general practitioner referrals. O'Brien and colleagues quote previous concern that there is a widely held belief among the medical and nursing professions that incontinence is more of a nuisance than a real problem,² and this may partly explain our results.

Our findings, based on a survey of general practitioners, and O'Brien and colleagues' findings, based on a survey of patients, lead to the same conclusion that a large burden of need is not being

met, even when services are available. The reasons for this are not clear, and the issue merits further attention.

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Urinary incontinence in women

SIR,—Linda Cardozo suggests that urinary diversion should be considered earlier rather than later for young disabled women with urinary incontinence.¹ Severe disability is not, however, necessarily a bar to learning how to perform self catheterisation as patients often show great ingenuity in their determination to gain control of their bladders.^{2,3}

We studied 112 women aged 16-85 who attempted to use intermittent catheterisation. Eighty eight women had a neuropathic bladder, mainly due to spinal dysraphism, multiple sclerosis, intervertebral disc lesions, spinal tumour, or spinal injury. Twenty four women had a non-neuropathic bladder, of whom a third had an atonic bladder associated with gynaecological problems. Although some women had no disability apart from incontinence, others were severely disabled and relied on wheelchairs. Many of these women, however, mastered the technique despite paraplegia, an anaesthetic perineum, intention tremor, severe spinal deformity, learning disability, old age, and even blindness. Their remarkable determination arose from the handicap imposed by incontinence, severe urinary infections, or episodes of acute retention.⁴

Cardozo recommends clean intermittent self catheterisation for patients with chronic urinary retention and overflow incontinence as it may enable them to become dry and safeguards the kidneys from the effects of back pressure and infection.⁵ As the technique is simple and safe and can be abandoned if unsuccessful with no long term side effects,⁶ it is always worth trying as an alternative to, or while a woman is awaiting, an operation.⁶ Some women have been so pleased with its results that they have continued with it in preference to surgery.

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Understanding Marfan's syndrome

SIR,—Ian Young's editorial on Marfan's syndrome raises the problem of distinguishing patients with the syndrome from patients with similar conditions within a range of connective tissue disorders.¹ The consequences of providing a diagnostic label may not be trivial for the patient.^{2,3}

The Berlin nosology attempted to establish strict criteria for diagnosing Marfan's syndrome.⁴ As Young comments, skeletal characteristics may be striking. We have studied families with no such skeletal features but with aortic dilatation and ectopia lentis and no relation fulfilling the criteria of the Berlin nosology. Another large family exhibits obvious skeletal features and several members of the family have aortic dissection but none show any eye signs. This large family did, however, show linkage to the fibrillin gene on chromosome 15 in the consortium study.⁵ In contrast to the above cases, one patient fulfils the criteria for Marfan's syndrome but does not have any evidence of aortic disease. How are we best to classify and, more importantly, counsel such patients? Will the first two families, which fail to qualify for the diagnosis of Marfan's syndrome, have a less serious prognosis than those that fulfil the criteria?

The perception of the term Marfan's syndrome, particularly among patients, is initially determined by family experiences. Families in which aortic dissection has resulted in death will regard it as a lethal condition, whereas those without such experience will not until advised that it is a risk of the condition. Raising such fears and the consequent need for regular monitoring is justified only if the risk is real. If patients labelled as having Marfan's syndrome do in fact have a heterogeneous collection of connective tissue disorders we can recognise disorders outside the strict criteria and should label them as "marfanoid" until we can determine with greater precision the risks concerned.

We hope that the progress in mapping the gene segregating with Marfan's syndrome and the finding of a decreased level of fibrillin in many patients with the syndrome⁶ will help to clarify these issues.

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Health of the nation: personality disorder

SIR,—Mental illness in relation to *The Health of the Nation* was addressed by Graham Thornicroft and Geraldine Stratthdee in the *BMJ*'s series of articles responding to the green paper,¹ yet I believe that it is pertinent to highlight personality disorder, a subcategory of mental illness that often passes undiagnosed. Its prevalence is roughly 10% in the total population, rising to 20-30% in those attending general practices.² When present with other diagnoses it worsens the prognosis, resulting in longer and more expensive treatment. Personality disorder is associated with target areas that have already been identified—namely, abnormal eating habits, alcohol and drug misuse, smoking, prevention of accidents, HIV and AIDS, and other mental illness itself.