Wales in 1985 (3 October, p 807). Although quota sampling can be used to produce a sample balanced by age, sex, and social class, it is unlikely that the sample will be unbiased.[1] The absence of any detail about recruitment procedures and response rates makes assessment of sample validity still more difficult. Moreover, the questionnaire used in the survey asked merely for details of alcohol consumption on a "typical day" in the past week and ignores two difficulties discussed by Wilson[2]: firstly, that alcohol consumption often differs between weekdays and weekends and, secondly, that this is persistently underreported.

The striking inconsistency of the survey's findings with those of earlier studies reinforces our uncertainties about its methods. The authors report that social class has "little important bearing" on alcohol intake. This finding is in direct conflict with that of larger surveys,[3,4] which have found a consistent relation between social class and alcohol consumption in men. The questionable inclusion of pensioners (a group with low alcohol intake) in the lowest social group, where alcohol consumption might be expected to be highest, may have contributed to this observation. Moreover, nationwide surveys of expenditure on alcohol[5] and reported levels of consumption[3,4] have suggested that alcohol intakes are much lower in the south east and East Anglia than in other regions, a finding which was not evident on this occasion.

There are obvious differences in methods between the 1985 survey and the 1978 survey[2] with which it is compared. Wilson used an electoral register sampling method and interviewed subjects in their own homes with a questionnaire designed to obtain information about drinking at particular times of day on each of the last seven days. Without evidence that the sampling procedures produce a similar population and the different questionnaire techniques gain similar responses with respect to alcohol consumption, comparisons between these surveys must be treated with considerable caution, irrespective of their superficial consistency with other indicators.

The quota sampler is, in the words of Yates, "continually looking over his shoulder and wondering whether some extraneous factor exists which will vitiate the conclusions based on his results."[6] We hope that future surveys published by the *BMJ* will not use quota samples of 926 subjects to represent the entire age, sex, social class, and regional characteristics of Great Britain.

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Risks and benefits in radiology

SIR,—Professor J Stewart Orr's leading article (19 September, p 685) highlighted a recent survey by the National Radiological Protection Board which revealed a wide interdepartmental range in radiation doses received by patients in English hospitals. He pointed out that these data are insufficient to show which specific improvements could give the most reduction in unnecessary high doses without any loss of diagnostic information but that unnecessary or inappropriate examinations must be contributory factors.

These important issues underpin several scientific studies which form a continuing research programme being conducted under the auspices of the Royal College of Radiologists. The issue of unnecessary examinations has been addressed in connection with preoperative chest radiography[1] and also in connection with skull radiography in uncomplicated head injury.[2,3] Current initiatives include evaluation of guidelines for selecting patients for 12 categories of radiographic procedures covering some 70 important clinical circumstances. The Medical Research Council funded an observational study of patient exposures in 18 *x* ray departments throughout Wales, which was carried out in 1983-6 to determine the relative importance to patient exposure of differing radiological techniques and to assess their appropriateness.[4] Analysis of this survey data has led to the formulation of rationalised procedures for the 12 categories of examination studied.

We have already reported on some of the factors mentioned by Professor Orr: "too wide fields,"[5] "wasted exposures through errors,"[6] and inappropriate choice of projection[7,8] for a particular examination. Current research is concentrating initially on implementing guidelines on the above factors, and our data relating to the appropriateness of film-screen combination will facilitate further improvements.

Our scientific studies will underpin the move towards requirements on the choice of medical *x* ray procedure, although we agree with Professor Orr that much remains to be done.

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Impotence: treatment by autoinjection of vasoactive drugs

SIR,—Messrs K M Desai and J C Gingell (10 October, p 922) are incorrect to say that there is no scientific evidence to justify the combined therapy of papaverine and phentolamine.

In our own studies the combination of papaverine and phentolamine produced a significantly stronger erection and was associated with a higher incidence of spontaneous erections irrespective of the aetiology of the condition. The potentiation of the effects of papaverine by the addition of phentolamine has been shown by Juenemann *et al*, whose work the writers cite at the end of their letter but do not refer to in the text.[1] Combined injection is undoubtedly more expensive but also more effective and it is for this reason that some of their patients with a low penile brachial index did not respond. In our own series only 10 of 287 men with a penile brachial index of $<0{\cdot}6$ failed to respond to the combination. Combined injections are a very simple way of diagnosing a venous leak, in that all 30 men in our series with a penile brachial index of $>0{\cdot}7$ who failed to obtain an erection after the intracavernosal injection of papaverine and phentolamine also failed to achieve an erection when the corpora was perfused at flow rates of >250 ml/min. Using digital subtraction cavernosography we showed that all 30 patients had venous leaks, and with appropriate surgery these patients have a curable cause of impotence.

There are undoubted problems with the penile brachial index as a measure of arterial supply to the penis, but few units will have the facilities to enable them to measure arterial flow more accurately.

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RAWP revisited

SIR,—Ms Jane Smith's leading article (24 October, p 1015) mentions only briefly why the Resource Allocation Working Party formula has not, and never can, equalise access to health care throughout England. This is because no system exists for the fair and appropriate distribution of funds within a region. That still depends on the "decibel" principle; and consultants with loud voices and plenty of time to use them will always win that game. What we really require is a "DAWP."

Your comment that Bloomsbury Health Authority and North East Thames region might like to build a hospital in the north of England—"where the morbidity is"—is well received; but they need not look that far. They need look only to the eastern boundaries of their own region to find poor resources and inadequacies to match those in any deprived northern district.

The most underfunded districts are to be found deep in the rich, overfunded south east. How can a RAWP gaining district gain in a RAWP losing region?

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SIR,—In her leading article (24 October, p 1015) Ms Jane Smith has made a fashionable assumption. She points out that the recent King's Fund study showed that the workload in central London had been increasing steadily over the past few years without a corresponding increase in doctors and then suggests that "presumably this is because there are still enough doctors to do the work. Thus does supply continue to subvert the definition of need."

The alternative and more likely explanation of the increasing workload is that the local population is becoming older and requires more medical care; in addition there are special groups concentrated in