which are perceived as abusive, or he may be being seen as some other significant person in the patient's life.

If the needs of the patient, including the need to express feelings and opinions, are put first these encounters can be rendered less traumatic. If gynaecologists function to satisfy their own needs—for example, “to convince [patients] that stereotyping is unfair”—the scene is set for further conflict.

JANET MENAGE

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Heart disease screening in Japanese children

EDITOR,—A L Clark and A J S Coats suggest that screening for hypertrophic cardiomyopathy is not yet feasible because of low disease incidence, lack of a reliable screening procedure, and lack of established treatment for modifying the outcome of this disease.¹

Since 1968 we have performed mass screening for heart disease in Adachi Ward, Tokyo.^{2,3} This mass screening programme is supported by the Tokyo Health Service Association and applied to all schoolchildren in the first grades of elementary school and junior high school every year. The initial evaluation consists of a questionnaire, selected electrocardiographic measurements (I, aVf, V1, and V6), and a simplified phonocardiogram. This is followed by auscultation by a cardiologist, chest radiography, an exercise electrocardiography, and echocardiography. We have picked up approximately one patient a year with hypertrophic cardiomyopathy during a 10 year period.⁴ The incidence was estimated to be 10/150 000, which is relatively low compared with that reported previously.⁵ This low incidence may be related to the use of low sensitivity screening tests involving a simplified electrocardiograph and phonocardiogram. Thus, as suggested, mass screening for hypertrophic cardiomyopathy only may not yet be feasible in terms of cost-benefit.

We have, however, newly detected other asymptomatic heart diseases such as arrhythmia, coronary artery aneurysm due to Kawasaki disease, and congenital heart diseases. The arrhythmias included ventricular tachycardia, long QT syndrome, atrioventricular block, and WPW syndrome, which can be a cause of sudden death. The table shows, as an example, the results of mass screening performed in Tokyo during the past three years. Approximately 1-1.5% of 100 000 schoolchildren who had been evaluated every year had positive findings on electrocardiography or phonocardiography, or both, about half of whom were diagnosed as having asymptomatic congenital heart disease. Most were patients previously

known to have congenital heart disease; only 5-10% were newly detected. The other half had abnormal electrocardiography features such as ventricular premature beat, atrial premature beat, complete right bundle branch block, WPW syndrome, and atrioventricular block. Myocardial disease was newly found in only six or seven patients a year. Though few patients with a potential risk of sudden death were picked up, mass screening can still be valuable even if only a few patients with a risk of sudden death are found. Certainly, sudden death can be avoided by forbidding these patients to exercise excessively.

Our mass screening system seems to be useful for detecting not only hypertrophic cardiomyopathy patients but also patients at risk of sudden death. To prevent sudden death, early detection and avoidance of strenuous exercise are required in patients with myocardial disease and other asymptomatic arrhythmias such as long QT syndrome or ventricular tachycardia, even if there is lack of proved treatment. Thus, combined screening for hypertrophic cardiomyopathy and dangerous asymptomatic heart disorders may be feasible.

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Drug misusers in Lothian

EDITOR,—Shay Griffin and colleagues described a change in injecting habits among drug misusers attending the Drug Problem Service in Edinburgh and suggested that the widespread leakage of prescribed oral opiates onto the “grey market” may have contributed to a shift away from injecting behaviours.¹ An alternative explanation may lie in the changing nature of their service and the methodology of their study.

The authors compared two samples of 50 consecutive referrals in 1988 and 1990 and found significant differences in past injecting frequency, recent injecting frequency, and recent injecting frequency among frequent past injectors. The authors recognise that these first two findings on their own do not exclude the possibility that the preponderance of past injectors in 1988 may account for the relative drop in recent injecting

frequency in 1990. This seems more likely when one considers that their growing service, which was established in 1988, increased its referrals in its second year in operation.² In addition, Shay and colleagues’ data suggest that the service began to attract a wider range of drug users who were less involved in injecting. Perhaps this could be explained by the tendency of new services first to attract those most in difficulty.

The finding that recent injecting frequency among the subsample of frequent past injectors had dropped significantly in 1990 needs closer examination. The authors assumed that their samples were comparable and that this finding reflected a change in injecting behaviour among drug misusers referred to the clinic. Again, the wider nature of referrals attracted may partially explain this. Alternatively, the message that injecting is undesirable behaviour may be getting across to this client group and they may be less likely to report this behaviour than in 1988.

Finally, the suggestion that the wider availability of oral opiates may be contributing to a decrease in injecting behaviour seems simplistic. Although harm reduction forms an important aspect of our response to HIV infection, the disadvantage should not be ignored. Wider availability of opiates may yet result in an overall increase of drug misuse in the population. A balanced approach to this issue is needed, but all too often the disadvantages of some treatments are portrayed as benefits in an ideological debate on HIV. Although the clinical impression of a decline in injecting drug misuse in Lothian may indeed be correct, this study fails to verify this decline.

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Early infertility treatments derived from human pituitary

EDITOR,—The risk of transmission of Creutzfeldt-Jakob disease to people treated with growth hormone derived from cadaver pituitaries is well known.¹ Yet in Britain nothing has been heard of patients who received gonadotrophins derived from pituitaries as treatment for infertility, although the gonadotrophins were obtained from the residue of the cadaver pituitaries from which growth hormone had been extracted.

Pituitary glands were shared throughout most of the 1960s by Professor F G Young of the department of biochemistry, University of Cambridge, and Dr A C Crooke (1905-90) of the department of endocrinology, University of Birmingham. Crooke was assisted by the biochemist W Butt. The Medical Research Council supported Crooke’s investigations into pituitary trophic hormones.² In addition to research subjects being treated, Crooke’s patients at the Birmingham and Midland Hospital for Women were treated with human pituitary gonadotrophin.³ From the early 1970s Crooke seems to have stopped using human pituitary gonadotrophin in favour of human menopausal gonadotrophin. There is no evidence that Creutzfeldt-Jakob disease can be transmitted by human menopausal gonadotrophin, which is derived from urine.

Two Australian women are known to have died of Creutzfeldt-Jakob disease after receiving injections of gonadotrophin derived from human pituitary as a treatment of infertility.⁴ Assuming that the incubation period is 12 to 14 years, the

Number of patients picked up by mass screening for heart disease in Tokyo

	Elementary school			Junior high school		
	1989 (n=55 186)	1990 (n=54 403)	1991 (n=52 762)	1989 (n=56 683)	1990 (n=55 755)	1991 (n=51 262)
No positive at initial evaluation	605	504	564	778	711	719
Congenital heart disease	291	243	256	250	248	201
Acquired heart disease	5	6	5	3	3	4
Myocardial disease	4	2	1	3	3	6
ECG abnormality	305	253	293	522	475	500

possibility exists that in the 1970s women died of Creutzfeldt-Jakob disease but the cause of death was incorrectly attributed. Evidence that a transmissible agent caused Creutzfeldt-Jakob disease was first published in *Science* in 1968.¹ It took several years, however, for anyone to make the connection between Creutzfeldt-Jakob disease and growth hormone. No doubt the same may apply to gonadotrophin derived from human pituitaries.

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Parental irradiation and excess childhood leukaemia

EDITOR,—Eve Roman and colleagues' study investigating the relation between parental employment in the nuclear industry and childhood leukaemia and non-Hodgkin's lymphoma¹ was first proposed by the Committee on Medical Aspects of Radiation in the Environment in 1989.² After the publication of the report by Gardner *et al* in 1990³ the committee recommended that the study should be completed as soon as possible.⁴ As one responsible for providing occupational health advice to radiation workers, I am surprised that the paper was not accompanied by a formal statement from the committee. When work is recommended by a national advisory group, in a subject known to be of enormous and instant interest to the media, advice to workers is greatly facilitated if expert assessment is available. Any delay can contribute to anxiety. In any work on transgenerational issues the provision of information to workers and their families is of the highest priority.

Roman and colleagues state that their study "was set up to investigate whether the excess [cases of childhood leukaemia in West Berkshire and North Hampshire] was related to parents' employment in the nuclear industry." On this basis, I wonder why its most fundamental conclusion is not stated as early as possible as "it has been shown that the cluster in Hampshire and Berkshire does not result from external radiation exposure of workers at the atomic weapons establishments." As the fathers of under 8% of the cases were employed at the sites it seems hard to imagine that any other conclusion can be reached. This important finding, however, is only alluded to in the final sentence of the abstract's conclusion, without any real emphasis. It is not raised overtly in "editor's choice" in the issue of 6 March, nor can I find reference to it in any coverage in the media. On this occasion, however, I find it hard to blame the press for the omission.

The more detailed statistics on the few cases with fathers employed in the industry are of interest but of limited value in relation to the nationally coordinated study of transgenerational risk which has been under way for some time, only part of which is mentioned in the paper. Gardner's name has become synonymous, among both the public and workers, with a postulated link between childhood leukaemia and paternal irradiation of 100 mSv in total and 10 mSv in the six months before conception. With the data presented indicating maximum doses of less than 5 mSv in total and zero in the six months before conception there seems to be nothing in the work to support such a

hypothesis. The statement that "our results can be interpreted as supporting Gardner and colleagues' finding" is, I suppose, based on statistical markers and associations rather than causal hypotheses but is open to misinterpretation. In examining their findings, the authors go on to speculate that the effect could be due to internal contamination by radioactive substances or some other exposure. Their text indicates that only one father of a case was monitored for contamination, and therefore no data are provided to support such a conclusion.

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Kidney donation after paracetamol overdose

EDITOR,—We wish to correct the impression given in S Jackson and colleagues' letter that hearts and corneas are the only organs salvageable from patients who die after paracetamol overdose.¹ Over the past two years we have transplanted five kidneys from such donors. All recipients received routine immunosuppression with prednisolone, azathioprine, cyclosporin, and antilymphocyte globulin. The results in these five unselected recipients have been at least as good as those in our "normal" transplant population, and we have encountered no special difficulties in management or follow up. The table gives details of the donors and outcomes.

It has been estimated that 160-200 patients die in the United Kingdom each year from paracetamol overdose, of whom perhaps half might be suitable donors of kidneys. Accurate figures for paracetamol overdose are not available from the United Kingdom Transplant Service, but only 19 kidneys were donated from suicide victims in 1992 (personal communication). Thus a large pool of potential donor organs is not being used.

One explanation for this is the mistaken belief that patients presenting with acute renal failure after overdose are not suitable for organ donation. The renal changes associated with paracetamol overdose are, however, fully reversible, and the kidneys can be safely transplanted in the absence of other confounding factors. This point is well illustrated by case 1 (table): the patient was oligoanuric for at least three hours before organ retrieval, had a plasma creatinine concentration of 213 µmol/l, and might not have been offered

for transplantation in many units; outcome was excellent.

If there is any doubt regarding current or previous renal function a valuable guide to tissue viability is the findings on microscopic examination of a frozen section of renal cortex taken at or before donor nephrectomy. We have twice used this technique, both times with excellent results.

We recommend that all patients dying of paracetamol overdose should be regarded as potential kidney donors. Without prejudice to their survival the patients should be managed in intensive therapy units so that optimum renal function is preserved. Evidence should be sought of previous renal status and the transplant coordinator informed at an early stage. Only in this way will we see an increase in organ donation from this hitherto underused source.

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Screening for prostatic cancer

EDITOR,—Fritz H Schröder discusses the many problems related to screening for prostatic cancer.¹ He emphasises that both the incidence of and mortality from prostatic cancer are increasing and that early detection might help to reduce the mortality from cancer. We agree when he argues that the conditions to do this for prostatic cancer have not yet been met. This is mainly because of the poor validity of the three screening tests (digital rectal examination, transrectal ultrasonography, and prostate specific antigen concentration). In addition, as Schröder mentions, until now separating latent from aggressive prostatic cancers has not been possible, which carries a considerable risk of overtreatment.

We disagree that prospective studies should be carried out urgently because screening for prostatic cancer has already become widespread. Screening that was initiated as part of research has now become routine, with a decreasing emphasis on thorough evaluation. What is needed is a rigorous analysis of existing screening programmes: by analysing data from these programmes, combined with population data on prevalence and prognosis, it should be possible to answer four important questions.

Firstly, is it possible to separate latent from progressive prostatic cancer when the tumour is detected at an early stage?

Secondly, is the prognosis of progressive tumours influenced by early treatment?

Thirdly, is a suitable (combination of) screening test(s) available?

Fourthly, does screening for prostatic cancer reduce mortality from the disease?

Despite the current economic recession we fear that both the public and policymakers will continue

Details of five patients who donated kidneys after death from paracetamol overdose and of recipients

	Case 1	Case 2	Case 3	Case 4	Case 5
Donor:					
Age (years)	21	17	28	47	47
Sex	F	F	F	F	F
Recipient:					
Age (years)	35	17	25	49	51
Cause of renal failure	Spina bifida	Reflux	Vasculitis	Small kidneys	Obstruction
Haplotype match	2	0	1	0	0
Time to independence from dialysis (days)	7	0	0	0	20
Rejection episodes	0	1	1	0	3
Follow up (months)	2	1	12	10	10
Current creatinine (µmol/l)	65	84	93	83	134