representatives of the medical profession what are the current issues and areas of development in their particular specialties and to increase their understanding of the current practice of medicine. A further 17 such seminars are planned for the next five months, with particular emphasis on extending the work throughout the country.

The Institute of Health Services Management's wider programme of seminars for the coming months covers a considerable range of topics of mutual interest to both doctors and managers. Subjects include technological assessment, the manager and medical audit, managing change through clinicians, and community care planning.

The intention of all these events is to enable doctors and managers to explore current issues together and learn from each other's experience, thereby learning more of a common language and, often, realising that they share totally common values and aspirations. This is the common ground that is substantially shared by doctors and managers at a local level irrespective of what may be going on in the higher realms of politics or the civil service.

I welcome the tentative optimism and vote of confidence hidden in the depths of Dr Smith's editorial. All the work carried out by this institute shows that the divide between managers and doctors is so often more imagined than real. It also shows that managers are making strenuous efforts to narrow the gap and to develop a shared understanding of the issues that we must tackle together if we are to have any hope of making real progress.

PAMELA CHARLWOOD

Director,
Institute of Health Services Management,
London W1N 4AN

1 Smith R. Management in the NHS. *BMJ* 1991;**302**:1555-6. (29 June.)

A tax on infertility?

SIR,—On 1 August the responsibility for regulating assisted conception units will pass from the Interim Licensing Authority to the Human Fertilisation and Embryology Authority.[1] Many of the effects of this change have not been fully appreciated by colleagues. There are three main concerns.

Firstly, the preliminary consultation document on the code of practice has indicated very clearly that, "the effect of the act is to prohibit the normal interchange of information between clinicians. If a centre, in accordance with normal clinical practice, wishes to pass on information about a client to another clinician who is not covered by a licence, it should do so by writing to the client and asking him or her to pass it on."[2] The effect of this clause will be that we will be unable to write directly back to referring consultants or general practitioners about their patients and we will not be able to communicate any detail of patients' treatment by telephone. We are told that all communications *must* be made through the patients, who *may* pass the communications on to their doctors if they wish to. We have protested vehemently that this is an unworkable and dangerous regulation and is utterly opposed to our profession's normally accepted belief in good communication between colleagues.

Secondly, a "levy" or "tax" of £30 for each treatment cycle of in vitro fertilisation or gamete intrafallopian transfer and £7 for each donor insemination carried out is to be raised from licensed clinics, in addition to an annual licence fee of £350.[1] In a unit such as Bourn Hall, which carries out some 1200-1400 treatment cycles a year, this will mean an annual levy of about £40 000. We are absolutely unable to absorb this cost and must therefore pass it on directly to our infertile patients. This extra charge is quite unfair, unacceptable, and unprecedented in medicine.

Thirdly, as the regulations stand at present, embryos created with the use of donated eggs or sperm may not now be transferred to couples unless all identifying data on the donors have been registered with the Human Fertilisation and Embryology Authority. Of 4500 embryos stored in this clinic, at least 1200 were created with donor gametes. Because we will now be unable to trace many of the donors and many others will refuse permission 50-75% of these embryos will probably need to be destroyed. Steps must be taken to allow these embryos to be used for the couples for whom they were intended during a transition period. It is understood that the Human Fertilisation and Embryology Authority is seeking further legal guidance on this emotive and ethically contentious regulation.

In general, those of us who have participated in discussions on the act during the past two years are content with its overall aims and are impressed by the strenuous efforts that the Human Fertilisation and Embryology Authority has made to consult with all interested parties. I believe, however, that these three major problems have arisen because of overzealous interpretation of a legally very complex act. Consultants and general practitioners referring patients to units such as ours should be patient when the normal communication system about patients appears to break down—it will only be because we are obeying the law as it now stands.

PETER R BRINSDEN

Bourn Hall Clinic,
Bourn, Cambridge CB3 7TR

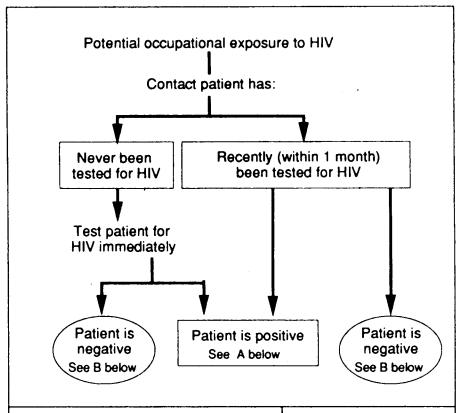
1 Correspondence. A tax on infertility? *BMJ* 1991;**303**:244. (27 July.)
2 Human Fertility and Embryology Authority. *Code of practice: consultation document.* London: HFEA, 1991.

Zidovudine after occupational exposure to HIV

SIR,—Our institution, comprising three hospitals with a total of 1224 beds and 2700 health care workers, has decided to follow the recommendations of San Francisco General Hospital with regard to prophylaxis with zidovudine for health care workers at risk of seroconversion after occupational exposure to HIV.[1] There is reluctance, however, to give this potentially toxic drug unless the contact patient is known definitely to be seropositive. Another problem in dealing with this issue, as Professor D J Jeffries emphasised in his editorial[2] is that of making zidovudine readily available.

We decided to put the emergency department in charge of coordinating this problem, the main reason being the presence there of senior physicians around the clock. Having elicited the agreement of our administration, we informed all medical directors and head nurses of the following points: all staff should be referred to the emergency department immediately after possible occupational exposure to HIV; HIV testing with an enzyme linked immunosorbent assay (ELISA) was possible within an hour at all times in such cases; similarly, zidovudine could be delivered immediately if necessary, and all procedures were free of charge for health care workers. An algorithm was also displayed in the emergency department for all doctors on duty to follow (figure).

From March to June 1991, 13 health care workers were potentially exposed to HIV, all through percutaneous needlestick injuries. Three of the contact patients were known to be positive for HIV at the time of the accident; the 10 other contact patients, whose HIV status was unknown, were tested within an hour after the accident, and the results were negative. All the health care workers were subsequently tested the next week, and results were negative. Three health care workers received zidovudine for three weeks. One experienced gastrointestinal intolerance, which resolved after the dosage was reduced.



A

(1) Test health care worker for:
HIV
Red cell, white cell, and platelet counts
Alanine and aspartate transaminases
β Chorionic gonadotrophin (if a sexually active woman not using contraception)

(2) Prescribe immediately:
Zidovudine for 1 week
(200 mg four times daily)

(3) Inform health care worker and obtain signed consent

(4) Refer to specialist within the week for:
Zidovudine for 2 additional weeks
Drug tolerance monitoring
Serological follow up as above

B

(1) Reassure health care worker

(2) Advise serological follow up:
In 1st week
In 6th month
At 1 year

Algorithm for deciding whether to give zidovudine to health care workers who may have been occupationally exposed to HIV

Our approach is original in that, firstly, it makes HIV testing and zidovudine available around the clock in the emergency department and, secondly, zidovudine is given only to health care workers with the highest risk of exposure to HIV.

D ELKHARRAT
J L WAUTIER
C CAULIN
N BONNET

Hôpital Lariboisière,
75465 Paris Cedex 10,
France

1 Henderson DK, Gerberding JL. Prophylactic zidovudine after occupational exposure to the human immunodeficiency virus: an interim analysis. *J Infect Dis* 1989;**160**:321-7.
2 Jeffries DJ. Zidovudine after occupational exposure to HIV. *BMJ* 1991;**302**:1349-51. (8 June.)

Failure to deliver hepatitis B vaccine

SIR,—We commend Dr N Bhatti and colleagues for reporting their failure to give hepatitis B vaccine to men attending a genitourinary medicine clinic.[1] They mention that it is now recommended in the US that hepatitis B immunisation should be extended to heterosexuals attending genitourinary medicine clinics, but they do not mention injecting drug users. A recent survey by the Public Health Laboratory Service of 1275 drug injectors found evidence of past or present infection among 42% of those who had started injecting in the early 1980s compared with 22% of those who had started injecting after 1985.[2]

In a survey of NHS drug services 64% of respondents did not screen for hepatitis B and 71% did not offer vaccination.[3] Clearly drug services need to pursue a much more active screening and vaccination programme for hepatitis B.

An unknown number of injecting drug users make contact with genitourinary medicine clinics for treatment of sexually transmitted diseases and for HIV testing. We recommend that this group should be included as a target group for hepatitis B

vaccination. This is particularly important for those drug users who fail to make contact with drug services. General practitioners and prison medical officers could also have a valuable role in extending vaccination to drug users who are not in contact with drug services.

The effect of hepatitis B vaccination on injecting behaviour and sexual risk taking behaviour has not been evaluated, but it probably helps reduce risk taking behaviour. Perhaps, by auditing the delivery of hepatitis B vaccination to drug users, we can lay the ground for future HIV vaccination programmes. Lessons learnt now may save valuable time later.

MICHAEL FARRELL
JOHN STRANG

Drug Dependence Clinical Research and Treatment Unit,
Bethlem Royal and Maudsley Hospital,
London SE5 8AF

1 Bhatti N, Gilson RJC, Beecham M, Williams P, Matthews MP, Tedder RS, *et al.* Failure to deliver hepatitis B vaccine: confessions from a genitourinary medicine clinic. *BMJ* 1991; **303**:97-101. (13 July.)
2 Public Health Laboratory Service. The unlinked anonymous HIV prevalence monitoring programme in England and Wales: preliminary results. *Communicable Disease Report* 1991; **1**(7):69-76.
3 Farrell M, Battersby M, Strang J. Screening for hepatitis B and vaccination of injecting drug users in NHS drug services. *Br J Addict* 1990;**85**:1657-9.

SIR,—Dr N Bhatti and colleagues report their failure to deliver hepatitis B vaccine to homosexual men attending a genitourinary medicine clinic.[1] The recent finding that reasonable antibody levels were frequently stimulated in health care workers after only three doses of an accelerated protocol given at 0, 1, and 2 months and a booster at 12 months[2] has encouraged many clinics to consider changing over to this regimen from the standard protocol of giving doses at 0, 1, and 6 months.

In Sheffield we have conducted a pilot study to compare default rates and the effectiveness of accelerated and standard regimens. During 1989-90 all newly presenting homosexual men and female prostitutes newly presenting at the department of genitourinary medicine who were negative for markers of HIV and hepatitis B virus were offered hepatitis B vaccination. Of 223 patients counselled, 180 accepted this offer. The first 90 (50 male, 40 female) were given the standard regimen and the next 90 (56 male, 34 female) were given the accelerated regimen. Demographic data for the patients in both groups were similar. Default in both groups was managed in a standard way throughout the study, and all patients vaccinated were asked to return six weeks after their third injection for measurement of the level of antibody to hepatitis B surface antigen.

Among homosexual men 45 of 50 (90%) admitted to the standard regimen and 49 of 56 (88%) admitted to the accelerated regimen completed their course of three injections. Completion was lower among female prostitutes, in whom the corresponding figures were 21 (52%) of 40 and 14 (41%) of 34. Altogether 102 of 129 patients attended for measurement of antibody to hepatitis B surface antigen after three injections (table). The accelerated regimen was significantly less effective than the standard regimen in producing satisfactory antibody levels. Moreover, the default rate was not altered by the accelerated regimen.

Number (percentage) of patients who developed protective levels of antibody to hepatitis B surface antigen (>50 IU) according to regimen of vaccination

	Standard regimen	Accelerated regimen
Homosexual men	27 (69)	7 (18)
Female prostitutes	9 (56)	3 (37)

We suggest that the accelerated regimen is less cost effective than the standard regimen and cannot be recommended in genitourinary medicine.

R PATEL
G R KINGHORN

Department of Genitourinary Medicine,
Royal Hallamshire Hospital,
Sheffield S10 2JF

G KUDESIA

Public Health Laboratory Service,
Northern General Hospital,
Sheffield S5 7AU

1 Bhatti N, Gilson RJC, Beecham M, Williams P, Matthews MP, Tedder RS, *et al.* Failure to deliver hepatitis B vaccine: confessions from a genitourinary medicine clinic. *BMJ* 1991; **303**:97-101. (13 July.)
2 Andre FE. Prevention of the transmission of hepatitis B infection by the sexual route. In: Piot P, Andre FE, eds. *Hepatitis B: a sexually transmitted disease in heterosexuals.* Amsterdam: Elsevier Science, 1990.

Same day testing for HIV

SIR,—Dr S B Squire and colleagues report a service providing HIV antibody results on the day of testing.[1]

In response to increasing demand we have been providing self referral, same day HIV testing each weekday since October 1989. Our clients are seen by an experienced counsellor alone, who takes a blood sample if HIV antibody testing is indicated. Like Dr S Sivapalan and colleagues[2] we are cognisant of the possibility of other sexually transmitted infections, and clients are referred to the genitourinary medicine department if necessary.

If a client is considered likely to be positive for HIV antibody, in addition to the screening immunoassay a rapid immunobinding test is performed. If the sample is reactive four further assays are instigated. By early evening, therefore, we are able to provide the counsellor with the results of the initial HIV antibody test and, when performed, of the confirmatory assays. Falsely reactive or equivocal results are rare. Clients identified as being HIV antibody positive are immediately referred to the HIV/AIDS consultant, who takes a second sample to confirm positivity.

In our experience most clients, both male and female, prefer counselling on a one to one basis as frankness of discussion may be inhibited by the presence of a third party.

We are aware that a number of people at risk fail to attend for HIV antibody screening elsewhere because they are unable to come to terms with a delay of days, and possibly weeks, before they are told the result of the test. Many are often more afraid of the uncertainty and the wait than of the result itself. The immediacy of same day testing reduces this fear.

We strongly advocate the establishment of "no nonsense," easy access, self referral same day HIV testing services for the worried well, to complement the testing facilities available in genitourinary medicine, obstetric, drug dependency, and other clinics.

C J RONALDS
LESLEY STREETHER
ALISON MURRAY
W NELSON
F WARD
JANE ANDERSON
D J JEFFRIES

Department of Virology,
St Bartholomew's Hospital,
London EC1A 7BE

1 Squire SB, Eifford J, Bor R, Tilsed G, Salt H, Bagdades EK, *et al.* Open access clinic providing HIV-I antibody results on day of testing: the first twelve months. *BMJ* 1991;**302**:1383-6. (8 June.)
2 Sivapalan S, Harindra V, Basu Roy R. Same day testing for HIV. *BMJ* 1991;**303**:119. (13 July.)

SIR,—Mr S Sivapalan and colleagues raise a valid concern[1] that other asymptomatic sexually transmitted diseases may be missed in people who request HIV antibody tests at our clinic.[2] It is important to realise, however, that the people attending our same day testing clinic have chosen this service rather than a clinic for sexually transmitted diseases and probably are a different population from that reported on by Mr Sivapalan and colleagues. In fact, we actively encourage discussion about other sexually transmitted diseases as part of the counselling process and we work closely with our colleagues in genitourinary medicine to make referrals when appropriate. In addition, we believe that by making health services such as ours more available to people who might otherwise have no contact with health information we increase the likelihood that they will take up other screening services.

Dr Morris and colleagues are concerned that our counselling may not adequately address the possibility of false positive results.[3] This is such an important issue that we devoted a whole paragraph in the methods section of our article to explaining the information given to patients on this point.[2]

We are pleased to learn that our colleagues at St Bartholomew's Hospital have adopted a similar but distinct approach to testing for HIV. We join them in encouraging others to establish easy access, self referral clinics where results are available on the same day that testing is done.

S B SQUIRE
R BOR
H SALT
G JANOSSY
M A JOHNSON
J ELFORD
G TILSED
E K BAGDADES
P GRIFFITHS

Royal Free Hospital and School of Medicine,
London NW3 2QG

1 Sivapalan S, Harindra V, Basu Roy R. Same day testing for HIV. *BMJ* 1991;**303**:119. (13 July.)
2 Squire SB, Elford J, Bor R, Tilsed G, Salt H, Bagdades EK, *et al.* Open access clinic providing HIV-I antibody results on day of testing: the first twelve months. *BMJ* 1991;**302**:1383-6. (8 June.)
3 Morris DJ, Corbitt G, Crosdale E. Same day testing for HIV. *BMJ* 1991;**303**:119-20. (13 July.)

Hepatitis C virus: evidence for sexual transmission

SIR,—Dr R S Tedder and colleagues found a high prevalence of antibodies to hepatitis C virus among homosexual or bisexual men (8·7%).[1] On the basis of this they suggest that there is strong evidence for sexual transmission of hepatitis C virus. Our experience has been similar, but it seems important to discuss the results further.

We conducted a study to determine the extent of transmission of hepatitis C virus in homosexual men. Serum samples were obtained from 52 homosexual men who had been screened for antibodies to HIV. Testing for antibody to hepatitis C virus (C100-3) was performed with an enzyme linked immunoabsorbent assay (ELISA) (Ortho Diagnostic Systems). Twenty men were intravenous drug misusers, and 12 were positive for HIV antibody.

Of the 52 men, six had antibody to hepatitis C virus; this seropositivity rate (12%) is higher than that found among blood donors in our area (0·78%).[2] The presence of antibody to hepatitis C virus was significantly associated with a history of parenteral drug addiction (80% *v* 4·3%, $p<0·001$), the presence of HIV antibodies (41·7% *v* 2·6%, $p<0·01$), and the number of sexual partners (23·1% for those with >3/week *v* 0% for those with < 3/week, $p<0·05$).

Our findings are similar to those of Dr Tedder and colleagues, and they suggest that hepatitis C virus may be transmitted sexually. Another interesting finding is the significant relation between the presence of antibody to hepatitis C virus in homosexual men and a history of intra-