is therefore unclear, but screening certainly merits consideration given the cost of long term antiandrogen therapy for hirsutism compared with that of dexamethasone. A diagnosis of 21-hydroxylase deficiency would prevent the patient from being exposed to the potential adverse effects of long term treatment and may also avoid the necessity for infertility treatment.

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SIR,—Dr Gerard S Conway and Professor Howard S Jacobs fail to mention the importance of the responsiveness of hair follicles to androgen stimulation.[1]

Though there is evidence that most women with hirsutism have excess androgen concentrations, some women with excess androgen concentrations do not have hirsutism, and the correlation between the degree of androgen excess and the degree of hirsutism is poor.[2] A widely accepted explanation for these findings is appreciable interindividual variation in response of hair follicles to circulating androgens. One possible mechanism is an increased activity of 5α-reductase in the skin of women with hirsutism. This enzyme converts testosterone to the more biologically active dihydrotestosterone and its activity has been shown to be increased in genital skin of women with hirsutism when compared with that of controls.[3]

It is important to appreciate the role of hair follicle responsiveness to circulating androgens in hirsutism. Antiandrogen treatments directed more specifically at the skin may provide the best future approach to treating hirsutism.

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Catheterisation

SIR,—The results of Mr R Carter and colleagues[1] have some interesting corollaries with our studies on nurses and catheterisation.[2] In our survey of 294 patients with catheters in five district general hospitals only 1% of catheterisations in women performed on the ward were done by a doctor, and, indeed, 52% of these procedures had been proposed by nursing staff.[2] Female length catheters were used for only five of the 165 women. The choice of catheter gauge size was generally appropriate, sizes above 16 Charrière being used only in patients who had had a prostatectomy, but 72% of catheters used had a balloon size of 30 ml, usually only necessary after urological surgery.[3] A simple audit of equipment can rapidly pinpoint deficiencies in both the stocks of catheter available and their storage conditions.[4]

The confusing array of catheters available requires that both the selection of stock held on a ward and the choice of catheter for each patient be undertaken by expert staff—for example, the urologist or nurse continence adviser.

Finally, nurses providing equipment for catheterisations will probably have received formal instruction in this aspect of patient care.

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Influenza vaccination and the elderly

SIR,—Dr K G Nicholson raises interesting points about immunisation against influenza.[1] I wish to report the results of an attempt to improve immunisation uptake.

The study was based in a West Lothian health centre over the winters of 1986-7 and 1987-8. We invited all registered patients who were thought to be appropriate for immunisation as determined from computerised medical records by disease categories and age over 65 years. The non-responders were sent another letter to explore the reasons for non-attendance. A more comprehensive letter (explaining reasons for immunisation and possible side effects) was sent in the next autumn and the same follow up letter was sent to non-responders. In both these programmes the patients were sent a letter with an appointment time for immunisation and any immobile or housebound patient was offered a house visit. We thus tried to ensure that patients' refusal to be immunised was not due to us not putting over the message properly.

The table shows the results. Overall, the uptake was 70·4% (629/894) in 1986-7 and 60·6% (419/691) in 1987-8 (only those patients registered with the practice for both winters were included in the second year). Very few patients attended the health centre because of our follow up letter about non-attendance.

The results are surprising. There were cohorts of patients who thought that it was unimportant to be protected against influenza or who had had adverse reactions, and these patients did not alter their response to invitation to immunisation despite a signed explanatory request from their doctor. Nevertheless, an increase in uptake was seen in those patients who had previously regarded themselves as not having a chest problem. This phenomenon has been noted in part before.[2] We were disappointed that the level of uptake dropped appreciably despite a comprehensive explanatory letter, and we also note a lack of consistency in reasons for refusal for immunisation.

Nicholson *et al* have suggested that providing educational material about the risks and benefits of influenza vaccine and reappraising practice strategies may increase the number of elderly people who are immunised.[3] Unfortunately, our experience in patients of all ages does not confirm this.

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HIV and surgeons

SIR,—Dr B G Gazzard and Professor C Wastell wrote about the risk of HIV infection among surgeons.[1] Orthopaedic surgeons believe that they are at greater risk during operations than most other surgeons because of their extensive concern in trauma, the sharpness of skeletal fragments, and the nature of orthopaedic instrumentation. The British Orthopaedic Association over the past year has been formulating a policy to help minimise the risk of transmission of HIV and other bloodborne viruses during orthopaedic operations and procedures.

Though we accept that the risk at present in the United Kingdom is small, we do not accept that it can be ignored. The authors comment that nurses seem to be most at risk but fail to recognise that, in the United Kingdom at least, there are more than 10 nurses for each doctor in the health service, and therefore, statistically, more cases would be expected among nurses than among doctors (statement by the chief medical officer to the council of the Royal College of Surgeons, October 1990).

The rather dismissive attitude towards universal precautions is alarming. Though there is considerable disagreement over the need for routine testing for HIV, there does seem to be complete agreement on using universal precautions.[2,3] This policy is also the mainstay of the United Kingdom health departments' *Guidance for Clinical Health Care Workers*.[4]

As AIDS is spreading these universal precautions should become normal practice throughout

Reasons for non-uptake of influenza vaccination in patients considered appropriate for immunisation over winters of 1986-7 and 1987-8. Values are numbers of patients

1986-7	1987-8: Not offered, died, or moved away	No chest problems	Fear of needles	Protection not important	Previous bad reaction	No reply	Accepted	Administrative reasons	Minor reasons
No chest problems	6	5	1			6	8		1
Fear of needles	2		2				2		
Protection not important	6	1		1	1	13	3		
Previous bad reaction	5			1	17	9	9		
No reply						51	14	8	
Accepted	157	1		1	10	86	352	6	16
Administrative reasons	13	1			1	8	12	1	1
Minor reasons	9					13	19	1	9