up, should yield equally impressive results. If the authors are sceptical of this they should carry out a further study along these lines.

The authors' belief that "there will always be some women who will be forced to seek legal termination" prompts me to ask who do they think is going to apply this procedure? If it is the "force" of suggestion by society via husband or boy-friend, then surely the doctor must redress this imbalance by ensuring that his patient understands as far as possible the full implications of her request.

In conclusion, the authors' hope that the unhappiness of many of their patients has been replaced with the possibility of a brighter future by this policy of abortion and contraception is, with respect, a little naive and also premature. They are no doubt aware of the increasing weight of evidence linking therapeutic abortion with subsequent infertility, miscarriages, pre-maturity, increased perinatal mortality rate, and various gynaecological problems. Have they any evidence that the 360 women in their study are going to be exempt from such consequences?—I am, etc.,

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2 Combe, C. W., Campbell, S., and Beazley, J., Lancet, 1972, 1, 1276.
4 Brudenell, M., Proceedings of the Royal Society of Medicine, 1971, 64, 153.

Antibiotic Discs Active against Resistant Organisms

Sir,—The letter by Mr. D. F. J. Brown and Dr. J. B. Selkon (23 March, p. 573) prompts me to describe a similar experience.

While I was attempting to demonstrate that penicillinase-producing Staphylococcus aureus did not produce zones of inhibition around penicillin discs the organism was inoculated on to DST agar medium (Oxoid) on which discs stated to contain 5 units of benzylpenicillin and 2 μg, 10 μg, and 25 μg ampicillin respectively were placed. The former two discs did not show any zones of inhibition, a zone of 24 mm diameter was seen around the 2-μg ampicillin disc. The edge of this zone did not have the typical heaped-up appearance seen with penicillin discs alone. Furthermore, other 2-μg ampicillin discs of the same batch did not show a zone of inhibition when tested against Escherichia coli (NCTC 10418), a known sensitive strain.

The zone of inhibition produced by these evidently faulty discs when tested against the Oxford strain of Staph. aureus (NCTC 6571) was neither reduced nor eliminated by the addition of penicillinase to the medium, whereas the other discs did produce zones being produced by 2-μg, 10-μg, and 25-μg ampicillin discs of other batches. Obviously the suspect discs did not contain the antibiotic with which they were labelled. Attempts to identify the antibacterial substance in these discs penicillinase prevented zone being produced by 2-μg, 10-μg, and 25-μg ampicillin discs of other batches. But it is possible that it did have some activity against Staph. aureus but not against any of the strains of E. coli, Klebsiella spp. and Pseudomonas aeruginosa tested.

Six vials of this batch of faulty discs had been recently received in the laboratory and stored at 4°C. Several discs from each vial gave similar results. Most of these discs did not produce a satisfactory zone with the Gram-negative control strain of E. coli (NCTC 10418) in the routine tests it might have been assumed that they contained an incorrect amount of the intended drug. The fact that the disc substance other than that intended would not have been immediately evident.

Unlike the experience of Mr. Brown and Dr. Selkon all the discs tested in the batch were faulty and this should have been detected by the manufacturers' quality control procedures. Clearly, there is a need for urgent action to ensure that antimicrobial drug sensitivity discs comply with the manufacturers' description of them.—I am, etc.,

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Growth after Renal Transplantation

Sir,—Your leading article (1 December 1973, p. 505) raised pertinent questions concerning the crucial role of growth in the rehabilitation of children treated with chronic dialysis and transplantation. I do not believe that your statement that "the growth problems on dialysis are usually less than those following transplantation" is supported by the little evidence that is available. Evaluation of growth data of 46 children dialysed longer than a year in four centres1,2 and seven children in our centre reveals that only six of the 53 grew at a normal rate for their age and sex (four of seven in our centre). Growth after transplantation appears to be better. Grushkin and Fine3 reported normal growth of six of 26 children followed up longer than a year, though a more pertinent figure would be six of 18, since eight children already had fused epiphyses at the time of transplantation. In children treated with alternate-day prednisone, McLennan et al.4 found normal growth in four of 10. Of a total of 38 children in our centre, only seven grew at a normal rate; all seven were in a group of 21 who were treated with alternate-day rather than daily prednisone.

The factors causing growth retardation in children on dialysis and after transplantation are incompletely understood but seem to be primarily caloric deficiency in the former and steroid therapy in the latter. Some improvement in growth has been noted with the use of calorie supplements in children on dialysis5 and alternate-day prednisone regimens in children post transplant.6,8 At present, however, the long-term growth of most children treated with either dialysis or transplantation is poor and the available evidence does not support the statement that dialysis is preferable to transplantation in this regard.—I am, etc.,

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Correction of Plasma Calcium Measurements

Sir,—The two recent papers on this important subject (15 December 1973, pp. 640 and 643) have left some confusion in their wake. Dr. A. M. Parfitt (16 March, p. 520) has already made the very important point that as the point of correction is to gain a better indication of the ionized calcium level, a proportional rather than an absolute correction should be applied. Other correspondents (9 February, p. 245, and 2 March, p. 323) have commented on the discrepancies between the correction factors given in the two papers. In fact the factors proposed (0·91 and 0·99 mg calcium/100 ml per 1 g albumin/100 ml respectively) are less strikingly different from each other than they are from other recently reported estimates which lie in the region of 0·713.

The figure of Dr. Berry and his colleagues (15 December, p. 640) must be an overestimate for their cufling technique leads to an increase in globulin and other macromolecules capable of binding calcium as well as albumin. Their factor thus represents not albumin binding but total plasma binding expressed in terms of albumin. It is appropriate only as a correction for changes due to cufling and cannot properly be applied to the more useful purpose of allowing for variation in albumin levels in individual patients.

Dr. Payne and his colleagues (15 December, p. 643) have estimated a true albumin correction factor, but should their result supplant previous lower estimates? Their factor was derived from a study of a group of patients including many with hyperalbuminaemia. If, however, there were an association between albumin and globulin, the estimate of the regression of calcium on albumin would be biased, a positive correlation leading to overestimation because of the added binding of globulins. Unless the authors are able to discount this possibility it would seem wise for those wishing to correct calcium measurements to hold to previous lower estimates of the factor.—I am, etc.,

H. M. HODKINSON

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1 Moos, E. W., Gastroenterology, 1971, 60, 43.

The "Fifth Row"

Sir,—Cleanliness in public buildings conducive to morale as well as to health. Schools, which should be educative, and hospitals, where the frail are comforted, are par-
Coping with Nose-bleeds

SIR,—There is a surprising omission from your leading article (9 March, p. 405). The treatment of anterior epistaxis is adequately summarized, and even the use of an inflatable rubber bag in the nasal cavity is mentioned. However, posterior epistaxis which is generally more profuse and constitutes a more serious problem in management, receives less attention. The only advice given to the general practitioner or casualty surgeon is to transfer the patient, presumably still bleeding profusely, to hospital for administration of a general anaesthetic. The use of a Foley catheter obviates the necessity for anaesthesia with the concomitant dangers of regurgitation of blood from the stomach and possible aspiration which can be easily inserted through the nasal cavity, even local anaesthesia being unnecessary, and inflated when it reaches the epipharynx. Gentle traction into the choanal opening produces an effective tamponade and prevents the swallowing or aspiration of blood. Transport and further management of the patient are thereby simplified and removal of his form of post-nasal packing is easily performed and causes minimal patient discomfort.—I am, etc.,

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Death during Dental Anaesthesia

SIR,—I read with interest the comment made by Dr. G. Bourne (16 March, p. 516) on the case of a recent patient during dental anaesthesia which was reported in your medicolegal column (2 February, p. 207). I should like to report a recent fatal case of severe unaccountable collapse following administration of anaesthesia in a dental chair.

A healthy child aged 10 needed dental extractions as he was suffering from an alveolar abscess and was in pain. He had developed chickenpox two days earlier. The child was instructed to take two 50 mg trimethoprim tablets an hour before attending.

The child walked into the dental surgery and was seated in the chair. Mrs. O'Neill, and the necrassely soiled lavatory walls of which she complained. It is remarkable that the hospital secretary should be reported to have stated, as it were in defence, that the walls remained soiled for eight days rather than the 18 days claimed by Mrs. O'Neill. It is even more extraordinary that the case should be said to be drawn "attention to the lack of any agreed procedure for disciplining nurses. What it should do is to write an agreed agreed procedure for cleaning hospitals.

Part of the trouble may lie in the Crown exclusion of N.H.S. hospitals from the province of the (public) Health Inspectorate. Can we not now open the hospital services to inspection by the health inspectors of the new local authorities?—I am, etc.,

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Central Nervous System Effects of Pentazocine

SIR,—We were interested to note the findings of Dr. A. J. J. Wood and others (23 March, p. 550) on the effects of pentazocine on the central nervous system. We also have noted hallucinations in patients who received pentazocine in the postoperative period. However, we have found that hallucinations in association with other analgesic drugs are not uncommon. In a study of patients in the postoperative period we have compared the incidence of hallucinations following the administration of pentazocine with that following morphine. Patients admitted for elective general surgery were allocated randomly to two groups. For postoperative pain relief those in one group were given pentazocine 40-50 mg intramuscularly and those in the other group were given morphine 10 mg intramuscularly. The frequency of administration of these drugs was at the discretion of the nursing staff. Twenty-four hours after operation the patients were questioned regarding unusual experiences since the operation, particularly whether they had seen, heard, or felt anything that seemed

BRITISH MEDICAL JOURNAL 27 APRIL 1974