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 pressure? 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,¹ miscarriages,² pre-maturity, increased perinatal mortality rate,³ and various gynaecological problems.⁴ Have they any evidence that the 360 women in their study are going to be exempt from such consequences?—I am, etc.,

J. A. CURTIS

Stoke-on-Trent

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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* may show large 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 following day, while the other 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 penicillinase-producing organisms. 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 penicillinase prevented 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 were not successful but seemingly it was some substance active 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. Had these discs not produced 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 they contained a 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.,

M. S. SHAFI

Department of Microbiology,
Central Middlesex Hospital,
London N.W.10

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 centres¹⁻⁴ 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 Fine⁵ 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 McEnery *et al.*⁶ 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 calorie 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 dialysis⁷ 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.,

DONALD E. POTTER

Department of Pediatrics,
University of California Medical Center,
San Francisco, California

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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. 393) 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 0.7.¹⁻³

The figure of Dr. Berry and his colleagues (15 December, p. 640) must be an overestimate for their cuffing 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 cuffing 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 hyperglobulinaemia. If, as seems reasonably likely, 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 effect 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

Northwick Park Hospital,
Harrow, Middlesex

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The "Filth Row"

SIR,—Cleanliness in public buildings conduces to morale as well as to health. Schools, which should be educative, and hospitals, where the frail are congratulated, are par-