

TRAINING OF DOCTORS IN DEVELOPING COUNTRIES

SIR,—Professor Cook's point of view (Aug. 11, p. 297) will be widely supported by the silent majority of teachers of medicine in developing countries, even if the more vocal minority disagree.

Politically and medically, no country can manage without doctors, even if they only cap a paramedical pyramid, and they must be locally trained wherever possible. But equally certain is the impossibility—perhaps fully revealed only to those who have attempted it—of achieving local training wholly in rural areas. Nearly all the developing countries are so short of funds and of skilled personnel that staffing, equipment, and equipment-maintenance services can never be distributed other than in urban centres, where, therefore, the medical student must be based. This does not apply to medical auxiliaries, for whom training in rural areas is both practicable and desirable, nor does it imply that medical students do not require experience in rural areas during their training—that is essential. The major urban teaching hospital is not yet an anachronism in the Western world, and far less so in developing countries.

Until the developing country is developed, doctors are going to be hard pressed by the great numbers of patients requiring their services. To cope with the demands, students must be well trained, and supervised for at least their first year after registration, before they can see how and when to take the short cuts which they will need to use so often thereafter. Training second-rate doctors for second-rate medicine is a waste of everyone's time, and this strengthens the requirement for a national centre of educational and practical excellence as the milieu for teaching medicine. But, equally, doctors must neither be trained in minutiae not applicable locally nor grow so accustomed to their ivory tower (or even to research) that they have no wish (or ability) to work independently of all the support services which it offers. Nor must their horizons be allowed to contract to urban medicine, nor to lucrative urban private practice. Therein lies the importance of adequate and appropriate training in the periphery, from a centre of excellence, and that of maintaining a continuous two-way traffic of patients, staff, and students between the urban centre and smaller rural hospitals. An additional aid to improving the internal distribution of doctors is the form of national youth service adopted in Nigeria, where young graduates spend a year in rural areas soon after qualifying—doctors normally after their post-registration year. A second year could similarly be spent, say, five years after qualifying, in a more senior role, if circumstances required it.

The restricted numbers of medical teachers available in developing countries and their diverse origins, training, and even abilities all militate against major innovations in medical teaching being successful. This is not the time nor the place to experiment with curricula—attempts to introduce fundamental changes must be the prerogative of the developed countries, where small classes of uniformly high ability have ample back-up facilities and continuity of first-rate teachers. Where classes are large, and of very mixed ability, and teachers are equally variable, the bedside approach advocated by Professor Cook has stood the test of time; it has successfully produced all those who now clamour for innovation, and many would claim that it is still as important in the privileged "developed" countries today as it is in the third world.

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CHIEF MEDICAL OFFICERS ON THE G.M.C.

SIR,—As one of those shortly to take office on the General Medical Council I had rather hoped that we could meet before engaging in public controversy—if at all. My good intent however, will not stand up to the insinuations of Dr Grüneberg (Sept. 8, p. 531). What evidence has she that either chief medical officer will "press to reduce standards of medical practice to comply with service needs"? I trust that the new G.M.C. will co-opt to its committees those who will best carry out the tasks to be done. Each member will no doubt have his own views as to who holds the right qualifications. I am sorry having many friends amongst the members of the Medical Women's Federation, that Dr Grüneberg should speak thus for them all.

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**Dr Grüneberg has asked us to point out that the standing orders of the G.M.C. stipulate that the chief medical officer can become members of committees by co-option, not by election.—ED.L.

IMPLICATIONS OF EMBRYO TRANSFER

SIR,—We were interested to read Mr Cusine's article on some of the legal implications of embryo transfer (Aug. 25 p. 407). His doubt that obstetricians are considering embryo transfer as a means of producing a child must have been quickly dispelled by the mass media publicity surrounding one doctor's views on the possible use of surrogate mothers.

Over a year ago we embarked on a clinical programme of extracorporeal fertilisation and now appreciate the technical possibilities that such a study allows. We have also gained considerable insight into the depth of emotional involvement experienced by infertile couples having this method of treatment and the lengths to which they are prepared to go to have a child. Whilst we have no present intention of using embryo transfer in either of the two situations outlined by Mr Cusine—i.e., where a woman has been advised against a pregnancy on medical grounds or wishes to avoid carrying her own pregnancy—we feel that certain specific indications not clarified by him are worth considering as they should be just as acceptable as artificial insemination by donor sperm, a practice now regarded as a routine method of treatment.

A small proportion of patients are unsuitable for extracorporeal fertilisation because of the degree of pelvic adhesion restricting ovarian accessibility and making ovum collection difficult even at laparotomy. These patients could benefit from ovum donation and subsequent reimplantation of the embryo after fertilisation by their husband's sperm. We have found that 90% of patients undergoing elective sterilisation are prepared to donate ova for an approved research study and at least half of these would allow ova to be donated to an infertile couple. Confidentiality may be maintained by the donor being unaware of the chosen use of her ova. Cryopreservation would allow storage of donated ova and/or the holding of a fertilised embryo until an appropriate time in the recipient's menstrual cycle for reimplantation.

Similarly, where there exists a combined problem of oligospermia and tubal occlusion we have extended the technique of in-vitro fertilisation but utilising donor sperm. In both situations—i.e., ovum donation or sperm donation—the embryo is transferred to a woman who carries the fetus, delivers the baby, and mothers the child. It is our experience that these principles are perfectly acceptable to potential donors and recipients. Whilst these examples of extracorporeal fertilisation are presently possible, we wish to differentiate them clearly from the use of surrogate mothers, where greater ethical and emotional issues are at stake.

We assume that the legal implications of such techniques would be similar to those applying to artificial insemination by donor sperm. The Royal College of Obstetricians and Gynaecologists distributed guidelines to its fellows and members in

June this year concerning this subject. Perhaps these could be extended to incorporate the examples of in-vitro fertilisation with ovum and sperm donation that we have described.

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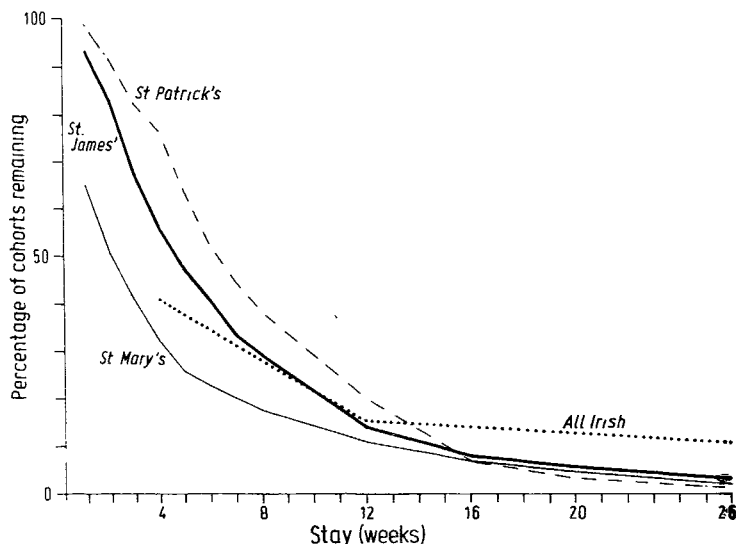
IAN CRAFT
JOHN YOVICH

PSYCHIATRIC PATIENTS: HOW LONG DO THEY STAY?

SIR,—Professor Priest and his colleagues (July 7, p. 40) have examined the length of stay of patients admitted to a 58-bed general hospital psychiatric unit which has had a full catchment area responsibility for the past two years. The plot of frequency of admission \times length of stay gave a good fit with an exponential decay curve. The expected unimodal curve centred on an average stay of 6–8 weeks was not evident. The data did differ from the theoretical exponential distribution, in respect either of an excess of patients staying a week or less or of staying in excess of 26 weeks. Priest et al. suggest that, if other workers find their data conforming to the same simple mathematical laws, they will have an instrument for predicting bed needs for the new long-stay population.

The 50-bed psychiatric unit at St James's General Hospital, Dublin, was established in 1969 as part of the Eastern Health Board psychiatric service, which consists of self-contained catchment areas. It is, however, administered on behalf of the Health Board as a ward of St Patrick's, a much older psychiatric hospital. St Patrick's itself is independent of the health service but takes one-twelfth of all Irish psychiatric admissions. A data bank has been in operation since 1975. It is therefore possible to compare St James's Hospital catchment area data and St Patrick's non-catchment area data with the St Mary's Hospital, London, data of Priest et al. and also with the total Irish discharge data, though this yields a limited number of observations to plot. The Dublin and Irish data do indeed fit an exponential curve like Priest's, but the slope is different (figure). In accommodating medium to long stay patients, occupied bed days are probably a more realistic measure of need. 1 patient occupying 1 of St Mary's 58 beds for three years uses up 1095 bed days, while the 308 patients (36% of total) who stayed less than one week used (308 \times 3.5) 1078 bed days. Even a small inaccuracy in projecting the tail of the exponential curve may thus have serious consequences in terms of bed provision, and this was the area that fitted the exponential curve least well. Community facilities may alter needs significantly where they are provided.

Is two years sufficient to permit accurate predictions from the data? The St James's unit was set up ten years ago as an



Distribution of length of stay.

PERCENTAGE OF YEARLY COHORT STAYING IN EXCESS OF 6 MONTHS

Hospital	1975	1976	1977	1978
St Patrick's	2.17	0.99	2.73	1.55
St James's	3.13	1.97	3.12	1.24

acute short-stay unit and was to have adequate back-up for chronic patients, psychogeriatric patients, and so on. This has not happened, and many patients have been "rehabilitated to the community" after years of stay in the old mental hospital formerly serving the area. When these patients relapse, admission is to the local catchment area unit. After ten years' operation only 40% of the acute short-stay beds contain acute short-stay patients. It may well be that in time the tail of Priest's one-year cohorts may defy his mathematical formulae. The St Patrick's and St James's data shows significant yearly differences of up to 275% between years 1975–78 (table). This area has had to function for years without any long-stay beds at all and has not silted up with chronic schizophrenics, whom we regard as treatable; however, behaviourally disturbed adult mental-handicap patients, psychogeriatric cases, and patients with mental sequelae of head-injuries or presenile dementia are major placement problems. The accumulation of chronic psychotics in the outpatient department and day centre is another story.

Mathematical analyses of patient data can generate hypotheses about bed need but these must be tested in a variety of situations and over a sufficient time span before they are allowed to become planning guidelines.

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THE SAFEST PLACE OF BIRTH

SIR,—We are pleased that Mrs Tew¹ looked at our data in an effort to prove a point of view she has long held. We are sorry, however, that in doing so she implies that we have been partial and tried to hide information from the public. We delayed replying to see if others wished to contribute; both Professor Butler with Mrs Golding (July 23, p. 200) and Professor Alberman with Dr Evans (Aug 18, p. 358) have made valid points and in so doing have shown that a more considered statistical approach could have led Mrs Tew to different conclusions.

Those who read our volume of the Report of the British Births 1970 survey² properly will have seen the reasons for restricting data analysis (p.x). The information Mrs Tew imputes that we concealed was not analysed with the original data. The whole survey was based on questionnaire-collected information; and overanalysis of such data and breaking it down to groups of small figures can lead to conflicting results. It is only the epidemiologically partial who use those data which agree with their hypotheses and avoid those which do not. Yet in one respect this is what Mrs Tew seems to be doing with our antenatal prediction score (APS). This simple score, as was explained in the text, is a guide at booking and does not involve events in pregnancy. The grouping of mothers at each place of delivery is not a homogeneous one, and attempts to draw conclusions from such groups would be statistically unsound. Like is not being compared with like. To find the information to confirm Mrs Tew's idea would need an index which accumulated data as pregnancy continued. This would rob the APS of its simplicity, a feature we hoped would help to widen its application. One of us (K.W.M.) has used the APS successfully in his unit for three years. In this time, the perinatal-mortality

1. Tew M. The safest place of birth. *Lancet* 1979; i: 1388–90.

2. Chamberlain G, Philip E, Howlett B, Masters K. *British births 1970: vol II obstetrics care*. London, William Heinemann Medical Books, 1978.