ished the average gestational age for detection.⁵ I agree with Dr Jarvis that the early diagnosis of twin pregnancy is a prerequisite for adequate antenatal care and management of delivery. In my opinion ultrasound, if available, is the diagnostic method of choice. With modern technology and with trained operators the method is highly reliable as a screening method. More than one scan should not be necessary—certainly not if twins are suspected and specially sought. With the new real-time scanners it is tempting to make it everyone's tool. However, I wish to stress that ultrasound diagnostics, similar to radiology diagnostics, should be performed by specially educated and trained operators if the method is not to be brought into disrepute.

LARS GRENNERT

Department of Obstetrics and Gynaecology,
S-214 01 Malmö,
Sweden

- ¹ Taylor, E S, *et al*, *American Journal of Obstetrics and Gynecology*, 1967, **99**, 671.
- ² Sundén, B, *Journal of Obstetrics and Gynaecology of the British Commonwealth*, 1965, **72**, 952.
- ³ Grennert, L, Persson, P-H, and Gennser, G, *Acta Obstetrica et Gynecologica Scandinavica*, 1978, suppl 78, p 5.
- ⁴ Powers, W F, *Obstetrics and Gynecology*, 1973, **42**, 795.
- ⁵ Grennert, L, *et al*, *Lancet*, 1976, **1**, 4.
- ⁶ Westin, B, *Acta Obstetrica et Gynecologica Scandinavica*, 1977, **56**, 273.
- ⁷ Mägisté, M, *et al*, *American Journal of Obstetrics and Gynecology*, 1976, **126**, 697.
- ⁸ Lidbjörk, G, Kjessler, B, and Johansson, S G O, *Acta Obstetrica et Gynecologica Scandinavica*, 1977, **69**, 45.
- ⁹ Vince, J D, *et al*, *Lancet*, 1977, **1**, 43.

Disinfection with glutaraldehyde

SIR,—I am afraid that Dr A C Mair's answer (15 September, p 673) to my letter (18 August, p 444) contains numerous inaccuracies which ought to be corrected. This gentleman wrote that I was wrong when I stated that alkaline glutaraldehyde has a maximum "use life" of 14 days.

My statement was that "under normal hospital use the alkaline compositions have a short life (maximum 14 days)." I am here talking of the continuous use and reuse of the same solution in the Arbrook Cidematic machines, which account for at least 60% of the Cidex market in US hospitals. I am not talking of the activity of a solution stored for 28 days as described by Miner *et al*.¹ Everyone knows that all cidal solutions in the USA have to show that they are still active after storage for 28 days. This has nothing to do with the activity of a solution in normal repeated use in hospitals in Cidematic machines.

Dr Mair should know that the only published data from Arbrook on this subject were released by Masferrer *et al*.² They showed that after 15 days (or 69 cycles) of continuous hospital use the Cidex content in glutaraldehyde was down to 0.87%. To reach the same level with Sonacide in the same machine one needed 26 days (or 124 cycles). Dr Mair should also know that Bageant from the University of Virginia hospital recently wrote³: "Arbrook is now recognising this problem [drop in glutaraldehyde concentration]. On their new Cidematics, they will be installing counters as well as timers. After 40 cycles or two weeks, whichever comes first, the glutaraldehyde will be discharged. The counters will also be installed on existing Cidematics in hospitals that want them."

In other words, Arbrook-USA had to recognise, under the supervision of the Environmental Protection Agency, that the active glutaraldehyde content of its alkaline

glutaraldehyde solutions drops faster under continuous hospital use than that of potentiated acid formulas. This indeed is in full agreement with the theoretical laws of physics (mechanical dilution) and chemistry (polymerisation of aldehydes).

By clearing the confusion created over the standard 28 days' storage life (referred to in Dr Mair's comments) one can see from the above figures and statements that in the USA Arbrook scientists themselves recognise the shorter two weeks' continuous use in hospital practice.

Cidex and Sonacide have long been proved excellent products in the US hospital market. Each one obviously has its merits and limitations, but it is important both from the scientific and from the practical viewpoint to distinguish between storage life and use life.

R M G BOUCHER

Wave Energy Systems Inc,
New York, NY 10021,
USA

- ¹ Miner, N A, *et al*, *American Journal of Hospital Pharmacy*, 1977, **34**, 376.
- ² Masferrer, R, *et al*, *Respiratory Care*, 1977, **22**, 259.
- ³ Bageant, R A, *Respiratory Care*, 1979, **24**, 666.

The concept of disease

SIR,—The concept of disease (29 September, p 757) has generally been approached from the adult standpoint, particularly that of the professional adult—medical, sociological, or philosophical.

Alternatively, however, the way that the concept develops throughout childhood can be explored. This shows up developmental sequences and cultural differences, but it also emphasises the way that illness and concepts of disease get drawn into the arena of communication between individuals, their families, and professionals such as doctors and teachers. It is essential that this topic is further developed to help improve communication between caring agencies and their clients, and to clarify what are frequently conflicting expectations of each other. This puts "disease" in the category of a word which is used to communicate different things for different people at different times. In order to respond most appropriately to our patients we need to have some concept of what is happening for the individual in the context of our meeting with that person—which consequently limits our use as doctors to a particular situation; "disease and doctor consultation," and we must remember that this is only one of many possible contexts.

I am currently researching how children develop their concepts of illness, and would be interested to hear from those with a similar interest.

SIMON WILKINSON

Young People's Unit,
Royal Edinburgh Hospital,
Edinburgh EH10 5HF

*.*This correspondence is now closed.—ED, *BMJ*.

Anaesthesia

SIR,—Dr J Alfred Lee in his admirable paper (10 November, p 1192) tells us that "anaesthesia in the 1920s differed little from what it must have been in the 1850s"; but, to judge by his description, anaesthesia in the 1920s differed little from that of the 1940s when I was first exposed to it as a medical student—

except, perhaps, that the water-sight Boyle's machine was in regular use.

Dr Lee's paper reminds us that, though the specialty of anaesthesia was a late comer and a late developer in medical history, its progress within the span of one man's professional lifetime has been as exciting as that of aviation or atomic power and that, as a unique clinical service specialty, it has facilitated advances in almost all other branches of medicine and surgery.

Dr Lee is, however, characteristically modest about his own share in this dramatic story. He is internationally revered as an innovator and a teacher; as founder-author of the anaesthetists' "bible," *A Synopsis of Anaesthesia*; and as president of the Association of Anaesthetists of Great Britain and Ireland. His contribution to the field of local analgesia is renowned and his pioneer work in the introduction of postoperative (recovery) wards led the way in the development of intensive care. His school of anaesthesia at Southend in the 'fifties and 'sixties was of world-wide repute and surpassed that of most teaching hospitals of the time in its willingness to teach and guide its trainees—to have been a registrar with Lee at Southend is to bask in reflected glory, like a soldier who served with Wellington at Waterloo or a singer who was taught by Caruso.

Dr Lee still practices and teaches anaesthesia in his well-earned retirement. May he long continue to do so.

T B BOULTON
Editor, *Anaesthesia*

Royal Berkshire Hospital,
Reading, Berks

Rubella immunisation

SIR,—A study I recently completed on services for the prevention of congenital rubella in an area of South-east England showed that the risk of rubella in pregnancy was widely appreciated but that most women did not know what practical steps should be taken to allay anxiety. Although most family practitioners were ready to provide serological screening and immunisation on demand, few women were aware that it was reasonable, before becoming pregnant, to ask a family practitioner about rubella prevention. Even women who had been screened for rubella antibodies as antenatal patients were mostly ignorant of the fact that they had been tested; the result was usually only mentioned to those considered to need immunisation.

Communication with the public must be improved if the policy statement that prevention is everybody's business is to lead to responsible action. The following three improvements would be valuable to the programme of congenital rubella prevention:

(1) General practices should display posters reminding patients to ask the GP about prevention. If the practice does not provide preventive services the poster should state the place and time of a public clinic which does. The DHSS should ensure that such posters are supplied to all practices.

(2) The makers of vaccines should include with phials information suitable for the adult patient. This information would reinforce verbal advice and give answers to the questions commonly asked.

(3) Women who have been screened for rubella and found seropositive should have "immune to rubella" stamped on a medical

card, which they keep; and its significance should be explained to them so that they are free of unnecessary anxiety in future pregnancies.

RUTH ELLMAN

London SW13

Weight penalties

SIR,—Readers may be grateful to Dr J S Garrow (10 November, p 1171) for his useful summary of the use of the body index W/H^2 in relation to mortality. He asks the question "Is the excess weight fat or some other component?"

To assess desirable weight Dr Garrow suggests that values of W/H^2 from 20 to 25 are best. This range corresponds approximately to 12.0-13.7 on the scale $Ht/\sqrt{Wt}$ (in inches and pounds) and, in terms of Sheldon's somatotypes, includes almost all mesomorphs at the age of 20. Those with W/H^2 ratios above 25 would be mainly endomorphs. As age increases they blossom, as can be seen from their skinfold measures, but there is little or no evidence of increase in bone size or calf or biceps girth if allowance is made for skinfold fat. Women are notably fatter than men. In the most overweight persons diabetes is commoner in women. Does not this suggest greater association with overweight in the form of fat? In the most overweight men the mortality ratio was only 1.95, much the same as for the most overweight women (207). But the greatest disposition to coronary disease is found in mesomorphs, actually endomorphic mesomorphs, rather than endomorphs; and the mechanism, to which I have referred earlier,^{1,2} is almost certainly different.

Incidentally, genetic predisposition does not, of course, imply that environmental change is impossible or that all treatment must be ineffective.

R W PARNELL

Sutton Coldfield, W Midlands B73 5JY

¹ Parnell, R W, *Behaviour and Physique*. London, Edward Arnold, 1958.

² Parnell, R W, *Lancet*, 1964, 2, 816.

³ Parnell, R W, *British Medical Journal*, 1977, 1, 1345.

Clinical practice and community medicine

SIR,—The correspondence (20 October, p 1005, and 27 October, p 1078) following Professor E D Acheson's paper (6 October, p 880) has chiefly concerned a possible clinical role for service community physicians. Many academic departments of community medicine grew out of university departments of social medicine, which contained people like myself whose training had principally been oriented to clinical medicine but who had acquired a special interest in epidemiology. A small number of such individuals now hold honorary consultant contracts in both clinical and community medicine. Despite the fact that there is a certain element of conflict concerning the distribution of research, teaching, and service in two specialties, such a possibility provides an attractive option to some and in my opinion both disciplines are likely to benefit from the existence of such appointments. At present there are probably fewer than a dozen in the United Kingdom and, so far as I am aware, they have without exception been purely personal appointments.

I find my own work combining community

and clinical medicine stimulating and I hope that the Faculty of Community Medicine and the royal colleges will consider ways in which training grades for such a career could be established.

J I MANN

University Department of Social and Community Medicine, Oxford OX1 3QN

SIR,—I was dismayed to read Dr Frada Eskin's letter on clinical practice and community medicine (20 October, p 1005). If she is correct in her analysis I am in the wrong game, but I do not accept this to be the case.

I believe it to be a fundamental mistake to seek to separate clinical and population medicine, because they are part and parcel of the same discipline: to speak of one without the other is to leave the yeast out of the dough. A doctor's prime responsibility is as advocate for his patient; to act in this capacity in a fully informed way he needs a working understanding of epidemiology and of the relative importance of primary, secondary, and tertiary prevention in his own daily work. Unfortunately, few people are prepared to take on the challenge involved in training doctors in the medical schools, and at postgraduate level, to have a systematic knowledge of their specialty areas that includes both the population and the public health perspective and a wider advocacy role.

If we were honest about the administrative aspects of community medicine, we would admit that the reason we want doctors to do the jobs is that we do not want non-doctors to do them. The reason for this apparently dog-in-the-manger attitude is because we wish to maintain medical control over decision making and over the health authorities, which must surely constitute the biggest quango of all. The place for departments of community medicine in all this is for them to be providers of information and intelligence centres where the interfaces of medicine can be explored. In such a setting there is room for wide combinations of interests and the department is enriched by the contacts involved.

My major concern about the faculty orthodoxy as expounded by Dr Eskin is that the end result would seem to be the construction of a vessel with no sailors to man it, as those of us who refuse to be forced into the mould return to work where we are accepted for what we are, and not what some people would have us be.

JOHN ASHTON

Department of Community Medicine, Southampton General Hospital, Southampton SO9 4XY

SIR,—Your leading article (6 October, p 817) and Professor E D Acheson's article (p 880) prompt me to draw the attention of your readers to the field of community liaison psychiatry whose existence is still not widely appreciated and where this dual approach to clinical work and administrative planning can be practised, as I have done for quite a number of years.

There is little doubt that a considerable number of psychiatric disabilities and problems can be and indeed are more appropriately contained in the community without referral to any hospital facility. This community psychiatric approach appears much more suited to the particular needs of many patients and clients, is far more economical in manpower and services, and additionally is often

preferred by the patients themselves and their relatives. It also prevents a number of cases from reaching crisis proportion, thereby saving scarce and expensive hospital accommodation.

Continuity of care incorporating the management and supervision of psychiatric patients discharged from hospitals back into the community engages our service to a considerable extent, as many patients are never entirely free from psychological disabilities which adversely affect their relationship with other people. Thus continuing advice and support are needed, and favourably influence a more appropriate rehabilitation and resettlement. Neither the primary health care team nor the community agencies, statutory and voluntary, either alone or even together, can effectively manage and support these cases. This is precisely where the community psychiatrist plays a key role since he not only contributes his psychiatric expertise but also brings the various agencies together and co-ordinates their work.

If I may use my own position as a model, it is essential in my view that the community psychiatrist is basically a practising clinical psychiatrist possessing a knowledge of community medicine. This combined expertise, together with his work in the community and attachment to the local hospital psychiatric units, provides him with an understanding of the local needs and enables him to advise on the administration and planning of a comprehensive integrated psychiatric service for the district.

A community psychiatrist is probably also better placed than his whole-time hospital colleagues to undertake research into the epidemiology of psychiatric disabilities, especially as these are met with in the community. In a community setting such a psychiatrist also has greater opportunities for applying prophylactic measures.

Primarily this "community-orientated multi-disciplinary psychiatric team" approach takes an active part in the management, treatment, care, and rehabilitation of patients in the community. From my own observations I consider that a full-time community psychiatrist would be appropriately related to a population of about 200 000—that is, the size of an average health district—but, depending on the extent of his hospital involvement, this may have to be reduced to 1 per 120 000 population. This does not necessarily imply an increase in recruitment for this specialised field but rather a redeployment of some suitable presently employed personnel.

U P SEIDEL

Haringey District Community Health Office, London N15 4RY

Professional standards for consultant appointments

SIR,—Mr Peter Diggory (3 November, p 1147) is quite rightly concerned that consultant appointments in obstetrics and gynaecology have been given to candidates who have not received full accreditation by their royal college. His specialty, however, is not alone, since there have been three consultant appointments in neurosurgery in the last two and a half years where the successful candidate had not received full accreditation from the Royal College of Surgeons of England. Indeed, the most recent appointment was given to a candidate whose senior registrar training in this country was at a unit that was not recognised by the Royal College of Surgeons' specialist advisory committee for senior registrar training in neurosurgery.

The royal colleges are constantly reminding us of their role in training and maintaining standards, but unless they are prepared to take a more firm line on the true role of accreditation