fingers was captured by a sculpture (fig 1). A useless armamentarium of crude instruments was presented in theatre (fig 2). Her fingers were freed when my variable speed Hobbydrill was used with its cutting attachment; the blade of tissue forceps was interposed to protect the tissues. This equipment helped save the child's fingers. She was allowed home the next day, and there was no sign of the injury at follow up six weeks later.

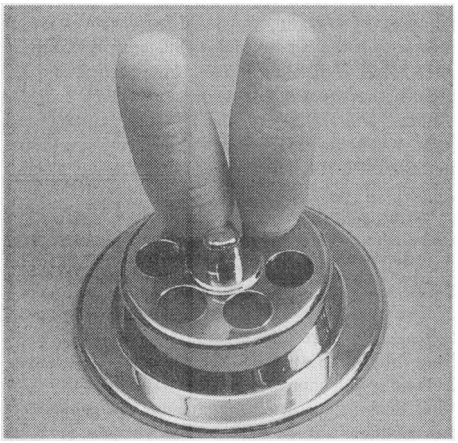

FIG 1—*Sculpture of fingers caught in plughole*

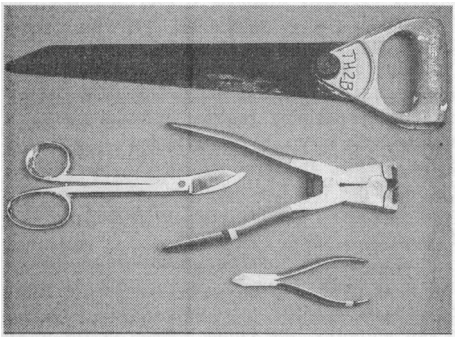

FIG 2—*Useless instruments in theatre*

The drill was in the hospital only because I intended to engrave the neonatal stethoscopes. It is an adaptable, controllable, and precision piece of equipment and would be a worthwhile investment (of about £40) for hospitals until manufacturers change the design of their waste outlets.

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1 Esberger DA. Photo finish. *BMJ* 1993;307:1634. (18-25 December.)
2 Crowder S, Mitra S. Photo finish. *BMJ* 1993;307:1634. (18-25 December.)

Access to cardiac catheterisation

Influenced by deprivation, not sex

EDITOR,—F Kee and colleagues have added to the continuing controversy regarding fair access to cardiological services.[1] They found that the rate of cardiac catheterisation was significantly lower in women than men and noted no influence of social background. This is in contrast to our findings.[2] We have updated our results and continue to find a strong influence of social deprivation on the uptake of both cardiac catheterisation and coronary bypass surgery, particularly in women (submitted for publication), but no significant sex bias in cardiac catheterisation based on patients discharged from hospital with coronary heart disease.

The following may explain the differing findings. We restricted our analysis to patients aged 35-64 since we thought that they were most likely to be affected by non-clinical variables: younger patients would almost certainly be investigated, irrespective of their social status, and older patients would be presented for investigation because of symptoms that could not reasonably be ignored on demographic grounds. The rates of cardiac catheterisation in our population were roughly four times higher than those in the population studied by Kee and colleagues. Our patients were allocated to eight groups according to their deprivation score; the groups were not equal in size but had comparable mixes of deprivation and affluence. In contrast, Kee and colleagues' patients were divided into fifths. The larger numbers of investigations and social groups in our study may have enhanced our ability to detect an influence of social deprivation. Furthermore, our higher rates of catheterisation may have allowed more liberal and subjective criteria to influence the decision to investigate.

These differences reinforce concerns about different patterns of investigation and treatment of patients with coronary heart disease.[3,4]

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1 Kee F, Gaffney B, Currie S, O'Reilly D. Access to coronary catheterisation: fair shares for all. *BMJ* 1993;307:1305-7. (20 November.)
2 Findlay IN, Dargie HJ, Dyke T. Coronary angiography in Glasgow: relation to coronary heart disease and social class. *Br Heart J* 1991;66:70.
3 Findlay IN, Cunningham D, Dargie HJ. The effect of cardiac catheterisation facilities on the rate of coronary bypass grafting in Scotland. *Br Heart J* 1992;68:69.
4 Clinical Standards Advisory Group. *Access to and availability of coronary artery bypass grafting and coronary angioplasty.* London: HMSO, 1991.

Access to surgery linked to social class

EDITOR,—F Kee and colleagues report the variation in rates of cardiac catheterisation among electoral wards in Northern Ireland and suggest that social deprivation has little influence on the rate once a proxy measure of clinical need has been taken into account.[1] We examined the relation between social class and rates of coronary artery bypass grafting in 7735 men aged 40-59 at entry to the British regional heart study, a prospective investigation of cardiovascular disease in 24 towns in England, Wales, and Scotland. Information on social class was based on occupation at entry to the study in 1978-80. Details of coronary artery bypass operations and major ischaemic heart disease events were obtained by annual review of the patients' records supplemented by tagging for fatal events at the NHS central register.[2]

By 1992, 91 men in the original cohort were reported to have undergone coronary artery bypass grafting. Forty (1·31%) of the men with a non-manual occupation had undergone such grafting compared with 48 (1·08%) with a manual occupation (odds ratio (non-manual:manual) 1·21 (95% confidence interval 0·78 to 1·89)). The higher rate of coronary artery bypass grafting in the non-manual group contrasts with the lower proportion of men in this group who had either evidence of ischaemic heart disease at entry to the study (odds ratio 0·65 (0·57 to 0·75)) or a major fatal or non-fatal ischaemic heart disease event during follow up (odds ratio 0·74 (0·61 to 0·88)).

These results suggest that social class differences in rates of coronary artery bypass grafting may not reflect clinical need, at least in this study population. The extent to which the imbalance observed reflects differences in rates of cardiac catheterisation and social class differences in acceptance rates for operation, possibly influenced by smoking[3] and other clinical and social factors, requires further exploration.

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1 Kee F, Gaffney B, Currie S, O'Reilly D. Access to cardiac catheterisation: fair shares for all? *BMJ* 1993;307:1305-7. (20 November.)
2 Walker M, Shaper AG. Follow-up of subjects for prospective studies in general practice. *J R Coll Gen Pract* 1984;34:365-70.
3 Underwood MJ, Bailey JS, Shiu M, Higgs R, Garfield J. Should smokers be offered coronary bypass surgery? *BMJ* 1993;306:1047-50.

Home visits by general practitioners

EDITOR,—Linda Beecham reports on the current state of negotiations about the reorganisation of out of hours emergency services by general practitioners.[1] The accompanying photograph of a young general practitioner visiting an elderly woman at home is ironic, because those who argue in favour of emergency centres overlook two important facts.

The first fact is that the overwhelming majority of home visits are made to patients over 65, who often have multiple diagnoses and are the least able to travel to emergency centres. I recently showed this in an audit of home visits in a semirural practice in Norfolk: 207 out of 265 visits were to patients over 65, in whom the three commonest diagnoses were respiratory tract infections, dizziness, and joint pain. These are clearly the patients who are least likely to be able to travel to an emergency centre.

The second fact often overlooked is that many general practitioners already try, whenever possible, to see patients out of hours on surgery premises, so that notes are available and treatment facilities are to hand.

As with many other aspects of the new health service, we are being encouraged to reinvent the wheel for a vehicle whose main problem is shortage of fuel. We should not sanction a change in our conditions of service that will ultimately reduce the standard of care that we offer to some of our most vulnerable patients.

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1 Beecham L. Home visits will fall with new GP scheme. *BMJ* 1993;307:1375. (27 November.)

Selective decontamination of the digestive tract

EDITOR,—M J M Bonten and colleagues agree with us that meta-analysis helps to clarify the methodological quality and clinical consistency of published research.[1] They also acknowledge the merits of our recent review of trials of selective decontamination of the digestive tract in making clear important differences in study design, population, and methods that may explain why results of different studies differ.[2] They criticise us, however, for using the "number to be treated" as a measure of the effect of treatment. They argue that only trials in which the incidence of pneumonia was high showed a positive effect of selective decontamination. Such a statement does not help in understanding the difference between statistical significance, clinical relevance, and cost-benefits. Everybody running an intensive care unit has to appraise the scientific evidence before deciding

whether something that has been shown to be effective in general will be effective in his or her particular setting.

To decide whether selective decontamination of the digestive tract should be used you have to consider not only the relative frequency of pneumonia—as Bonten and colleagues seem to suggest—but also the absolute number of patients cared for over a certain period. A 10% frequency has a very different meaning if it applies to 100 patients or to 3000 patients. For this reason the number to be treated is a good measure of the effect of treatment. Bonten and colleagues seem concerned that our estimate—based on the median prevalence of pneumonia in all the studies (29%)—was overinfluenced by studies with a high baseline incidence of pneumonia. Table III in our paper, however, shows that the estimate of the number to be treated is relatively stable across the whole range of incidence. Even if a baseline as low as 10% is assumed, an average of 16 patients should be treated to prevent an infection and an average of 52 should be treated to prevent one death. Is this information of no value or, as Bonten and colleagues indicate, "potentially misleading"?

Though we recognise the limits of our meta-analysis, it is unfair to say that we ignored the issues of resistance of extra costs resulting from selective decontamination. Rather, we said that these issues have not been evaluated in properly designed studies and that the information available is so sparse and its quality so poor that any conclusion based on the small number of studies that report some information is bound to be potentially misleading.

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1 Bonten MJM, Gaillard CA, van der Geest S. Selective decontamination of the digestive tract. *BMJ* 1993;307:1559-60. (11 December.)
2 Selective Decontamination of the Digestive Tract Trialists' Collaborative Group. Meta-analysis of randomised controlled trials of selective decontamination of the digestive tract. *BMJ* 1993;307:525-32. (28 August.)

Health care in South Africa

EDITOR,—Tony Waterston and Anthony Zwi make some valid comments regarding apartheid's effect on health care in South Africa but deal superficially with several important points.[1] The crucial difference between the National Medical and Dental Association's advocacy of so called selective support (more accurately interpreted as "selective boycott" as there is an element of coercion) and true selective support as advocated by me[2] seems to have escaped them.

Recent requests by the African National Congress for the removal of sanctions highlights understandable shifts of political strategy. Academic boycott on political grounds is legitimate if so described but illegitimate when assertions that it is moral are not accompanied by justificatory ethical argument. My objections to political strategies being posed under the banner of morality were articulated within a moral position against apartheid more consistent with the professional and academic ethos.[2]

Criticism of the University of Cape Town's academic support programme on the grounds that it is paternalistic and does not acknowledge the damaging effect of being educated in inferior schools is misguided. The reason for the existence of the programme is recognition of inferior schooling and to provide remedial tuition. When students on this programme were excluded 43% of first year medical students selected on merit for admission to the medical school last year were black.

Wide disparities in health in many developed countries[3] expose the naivety of expectations that legacies of apartheid will be erased overnight. Change is taking place, and the need now is for constructive contributions to the development of sustainable patterns of progress that will diminish inequity. It must be acknowledged that this will be a long, slow process, particularly given the continuing erosion of the South African economy and rapid population growth (about 750 000 people a year).

Interestingly, public health physicians envisage a "poor outlook for equity, comprehensiveness, and equality of access" to health care in the United Kingdom.[4] Hopefully, Waterston and Zwi are also addressing this and will provide data to improve health care under circumstances in South Africa that are much harder to rectify than those in the United Kingdom.

Finally, Waterston and Zwi's article is an example of colonial and paternalistic thinking. It fails to expose the real roots of disparities in South Africa and elsewhere.[5] These are perpetuated by, among other things, agencies from Britain and other countries opening recruiting offices in South Africa. Zwi would be a more convincing advocate for change if he returned to South Africa and joined his colleagues in contributing to transition.

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1 Waterston T, Zwi AA. Health professionals and South Africa: supporting change in the health sector. *BMJ* 1993;307:110-2. (10 July.)
2 Benatar SR. An alternative to academic boycott. *Nature* 1990;343:505-6.
3 Brooks DD, Smith DR, Anderson RJ. Medical apartheid: an American perspective. *JAMA* 1991;266:2746-9.
4 Pollock AM. The future of health care in the United Kingdom: poor outlook for equity, comprehensiveness and equality of access. *BMJ* 1993;306:1703-4.
5 Ray JL. *Global politics.* 4th ed. Boston: Houghton-Miflin, 1992.

Immigration status of overseas doctors

EDITOR,—The Home Office's regulations restricting the stay of overseas doctors in Britain to four years was implemented from 1 April 1985.[1] The doctors could work without a work permit for this period for training purposes, and, though there was no provision in the immigration rules to extend the period, the Home Office has used its discretion to allow people to switch their immigration status on the recommendation of the Department of Employment. Work permits have been issued to some doctors in specific jobs provided it had been proved that they were not competing with local candidates or candidates from the European Union. According to the NHS Management Executive's consultation document, from the beginning of this year all training grade jobs in the hospital and community health service will be excluded from the work permit scheme, which implies that doctors must complete their training within the specified period.[2]

Unlike doctors from the European Union, these doctors have to pass a difficult and expensive test—that set by the Professional and Linguistic Association Board—to prove that they are competent in English and professional knowledge. Passing the test enables them to take employment for training purposes for only four years.

In this era of subspecialised training, most doctors coming to Britain want not only to obtain qualifications such as the MRCP, FRCS, or MRCOG but also to have some training in their chosen specialty and to gain some research experience before returning to their home country in a consultant capacity. Under the current regulations, before a candidate takes part II of these examinations he or she must have at least 18 months (MRCP) to three years (FRCS) of experience. This means that even if the doctors pass all the examinations at their first attempts they will be left with little time for training in a specialty. In fact, most of the doctors only just gain the membership or fellowship of a royal college in this period; on implementation of the rules they have to leave Britain without completing their postgraduate training.

It would therefore be helpful if the training period was extended to at least six years so that the doctors could have two to three years' training in their chosen speciality before returning home. Obviously, being on the "permit free scheme," they would be unable to claim settled status in Britain and would therefore not be eligible to apply for further jobs. If service requirements no longer justify employing overseas doctors for this length of time then perhaps the entire infrastructure of postgraduate training should be abandoned.

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1 Department of Health and Social Security. *Employment of overseas doctors and dentists in the United Kingdom.* London: DHSS, 1985. (HC (FP) (85) 14.)
2 Beecham L. Immigration status of overseas doctors will change. *BMJ* 1993;307:1567. (11 December.)

Measles immunisation in developing countries

EDITOR,—Peter Aaby and colleagues raise issues about measles immunisation in developing countries that deserve comment and further evaluation.[1] Measles before the age of 9 months remains an important problem in developing countries that was understated in the paper. In densely populated urban areas of west Africa the incidence may be as high as 30%.[2]

In a recent unpublished study of measles antibody levels in some 350 infants in Zaria, northern Nigeria, serological susceptibility to measles (defined as a haemagglutination inhibition titre of less than 1/8) rose from about 73% at 4 months to 90% at 6 months and 95% at 9 months. Thus immune protection should be offered to these infants before the age of 9 months. The point of contention is the appropriateness of the standard Schwarz vaccine for this purpose. When this vaccine is given in its modified heat stable form to infants aged 9 months the seroconversion rate is less than 70%, possibly because of poor potency and breaks in the cold chain.[3] Thus immunisation with this vaccine before 9 months of age results in poorer seroconversion rates.

The potential beneficial effect of the Schwarz vaccine, unrelated to the prevention of measles attributed to immunising infants before the age of 9 months, deserves further evaluation. Although this effect could be causal, the authors did not compare the immunisation records of the infants vaccinated before and after 9 months. The infants offered measles vaccination early may have been more likely to have completed the course of other immunisations. A single dose of a potent vaccine before the age of 9 months seems most appropriate. It is unfortunate that the high titre vaccines have been withdrawn after reports of high mortality, although causality and the pathogenesis of this association remain unexplained.

Previous studies of reimmunisation with measles vaccine in children, after the first dose early in infancy, suggest that the antibody response is poorly maintained.[4] If the standard Schwarz vaccine confers protection before the age of 9 months a second dose at 9 months may not alter the morbidity and mortality from measles sufficiently to justify the cost. The cost implications for the