clear that Dr. Rawson, who has one particular reason for being especially conscious of the problems of the deaf, was assigned to her investigation with my approval and that her report was published because I believed it to be an unusually good piece of work worthy of wider readership.—I am, etc.,

G. E. GODBER
Chief Medical Officer

Department of Health and Social Security,
London S.E.1

¹ Department of Health and Social Security, *Deafness: Report of a Departmental Enquiry into the Promotion of Research*. London, H.M.S.O., 1973.

SIR,—On reading the report on deafness by Dr. Annette Rawson¹ I was impressed by her authoritative opinion that the problems of the deaf adult are still neglected over much of this country. No reliable figures of the prevalence and incidence of acquiring hearing loss are available, little is known about causes, diagnostic tests are often inadequate for appropriate prescription of aids, and insufficient time is spent on teaching patients how to use them. Many people thus remain undiagnosed or do not use their aids.

Most doctors would readily agree that this is an alarming picture and thus the recommendations of the report, with its accent on a multidisciplinary approach, would, one imagines, have been welcomed. The letter (25 August, p. 455) signed by 11 members of various departments audiology denigrates her report in a destructive manner, with pedantic references to terminology, and points up what would appear to be possible errors of little consequence.

I would respectfully suggest to the signatories that it is perhaps in part owing to their "errors of both commission and omission" that such "persistent pessimism" as Dr. Rawson's seems justified. She has a profound understanding of the problems of the deaf; she is deaf herself and has fought to overcome this so that she is now able to make such a fine contribution as this report.—I am, etc.,

IAN K. SCOTT

Glyncorrwg, Glam

¹ Department of Health and Social Security, *Deafness: Report of a Departmental Enquiry into the Promotion of Research*. London, H.M.S.O., 1973.

American Medicine

SIR,—Recent discussion in your columns of the relative "inferiority" or "superiority" of American and British medicine prompts me to add some opinions viewed from the less prestigious level of family practice. I have been in the U.S. for nine months, looking particularly at the training of medical students, the systems of practice, and health care delivery and the following points are, I believe, important.

(1) "Superior" medicine in the U.S. is characterized by intensive and thorough investigation of the patient. It is widespread even in small hospitals and supports the view of Dr. I. L. Gregory (7 July, p. 50). Unfortunately, expensively equipped small hospitals can exist side by side in competition with each other. Their equipment often remains under-used and the patients are often over-investigated.

(2) The distribution of specialists through-

out the U.S. is related more to the physicians' needs than to those of the patient. A poor county or town will not attract the specialist. A wealthy area may well be served by an excessive number of specialists—for instance, neurosurgeons who rapidly develop a shortage of suitable patients. In order to maintain their competence and income these surgeons may over-treat their patients.

(3) Though "superior" medicine may be provided to hospitalized patients, the medical care system can fall apart on discharge. There may be no family physician available for the patient at home, no adequate public health nurse (district nurse), and no access to primary care other than the hospital casualty department.

(4) I disagree with Dr. Gregory that medical costs are adequately covered by insurance and the Medicare-Medicaid programmes. Outpatient costs are frequently not covered by insurance, and the Medicare-Medicaid programmes are related to the wealth of the area in which the patient lives. A poor county has to match the Medicaid funds provided by the Government. For instance, a local agricultural worker at this hospital was unable to obtain Medicaid. He was earning \$1,800 (about £700) per annum, \$100 more than the level at which Medicaid is provided. His disease, diabetes, was costing him \$600 (£240) annually, leaving him and his family £360 to live on for one year.

In general, physicians in the U.S. have higher standards than their counterparts in the U.K. But these standards apply only to the specific practice of scientific medicine. One must therefore ask, what is good medicine and who should make this judgement? Is it to be high-quality care, lacking in continuity and available only to certain portions of the population as in the U.S.? Or is it the provision of a lower standard with open access for all using an integrated health system? Certainly the American people are discontented with the service they are receiving. On the other hand, the British public, supposedly satisfied with their health system, may be unaware of the improvements of standards that are possible in the National Health Service.—I am, etc.,

PETER CURTIS

Family Practice Unit,
North Carolina Memorial Hospital,
University of North Carolina,
Chapel Hill, N.C.

Endotoxic Shock after Transhepatic Cholangiography

SIR,—The danger of endotoxic shock as a complication of transhepatic cholangiography is well illustrated by Mr. M. R. B. Keighley and others (21 July, p. 147). We wish to report a parallel occurrence in a patient with a bile duct carcinoma rather than calculi and survival from the episode of endotoxic shock for four months.

A 54-year-old man presented with obstructive jaundice, confirmed at necropsy 16 months later as being due to a carcinoma of the common hepatic duct. At exploration originally cannulation of the duct had been attempted without success and a liver biopsy revealed merely pericholangitis. A biliary fistula resulted and anastomosis of the track to a jejunal loop relieved all the symptoms, though mild jaundice persisted. The biliary fistula recurred spontaneously a year later and a percutaneous transhepatic cholangiogram was performed without antibiotic cover. Within two hours

the patient developed rigors, fever, tachycardia, and hypotension. Culture of the bile and blood grew *Escherichia coli* of similar sensitivity and the systolic blood pressure remained below 100 mm Hg for 14 hours. Treatment with hydrocortisone, gentamicin (to which the organism proved sensitive), isoprenaline, blood transfusion, and mannitol (50 g total dose) resulted in clinical improvement and ultimate relief of the oliguria. A Longmire procedure was then carried out, as the cholangiogram showed a communication between the right and left hepatic duct systems. The patient left hospital in three weeks but died four months later of cholangitis and liver failure. Necropsy confirmed these findings with histological confirmation of a locally extensive bile duct carcinoma at the junction of the right and left hepatic ducts.

Contamination of the biliary tree was possibly present in this patient before the transhepatic cholangiogram. If so he had no signs or symptoms of it for a year, but the appearance of a biliary fistula a few days before the cholangiogram was clearly significant. The episode of endotoxic shock, however, was clearly a sequel of the cholangiogram, and it is possible that the use of isoprenaline and early mannitol infusion, as recommended by Dawson,¹ contributed to recovery by shortening the time of oliguria. The haphazard use of "prophylactic" antibiotics before cholangiography does not appear justified on two counts—firstly, that many Gram-negative organisms are resistant to the non-toxic broad-spectrum antibiotics, and, secondly, that it is questionable whether antibiotics reach an obstructed biliary system.^{2,3}—We are, etc.,

ROGER LALLEMAND
GUY BLACKBURN

Guy's Hospital,
London S.E.1

¹ Dawson, J. L., *Annals of the Royal College of Surgeons*, 1968, 42, 163.

² Mortimer, P. R., Mackie, D. B., and Haynes, S., *British Medical Journal*, 1969, 3, 88.

³ Scott, A. J., *Gut*, 1971, 12, 487.

Higher Medical Training in Relation to Research

SIR,—There is some anxiety that the training programmes recommended by the Joint Committee on Higher Medical Training may have an adverse effect on research. The committee intend that research should be encouraged and full recognition should be given to its importance in training. However, a clinical research worker should be clinically competent and this is essential if he is to gain consultant status in the Health Service.

Most clinical research workers will seek accreditation in general medicine or in the clinical specialty with which they are concerned. A young doctor completing the M.R.C.P. within two years after the pre-registration year could engage in some clinical research in the third year of general professional training. He then could go on to hold, for example, a Medical Research Council clinical research fellowship in a basic science department for two years without any responsibility for patient care and return to an academic appointment with clinical responsibility to continue research in the same field. If this appointment provided appropriate clinical experience and responsibility and was held for at least two years the trainee would be eligible for consideration for accreditation.

We also intend that for those seeking accreditation in more specialized fields full