and the doctor's general assessment and opinion.

Dr. Sanazaro is experienced enough to anticipate criticism of the scheme. The criteria could be restrictive; they could become rigid rules which are difficult to modify or change, they could limit judgement and retard innovation. His qualifying comment that such things have not happened after medical auditing is not entirely reassuring and the cynic might reasonably suggest that even more committees are needed to pronounce on this. In general, bureaucratic methods seldom encourage initiative and are prone to political expediency. They tend to encourage mediocrity and overemphasize the importance of mistakes. Doctors, like many of their fellow men and women, certainly make mistakes. But to assume that medical auditing might render them infallible would be naive as long as medicine is recognized to be far from a pure science.

The main stimulus to medical auditing, rightly or wrongly, is financial, and indeed the major insurance companies and the federal government in the U.S.A. require hospital accreditation by medical auditing before reimbursement. Such a scheme is not, and is not likely to be, applicable to hospitals in the United Kingdom unless there is a breakdown in the hospital service as a result of disaffection on the part of the doctors, nurses, and technical and other staff. More than a few of the professional staff feel that a growing frustration and a tendency to build up an ever-increasing and costly administration, unless checked, could lead to a significant decline in hospital standards. Others maintain that this has already happened. But whatever the facts may be it is to be hoped that the traditions of British medical and nursing training will not be forgotten and that responsibility and service will continue to be acknowledged as attributes.

A good case, no doubt, could be made for developing a bureaucratic system of medicine in a society that is wedded primarily to materialism. But in our own environment we have already learnt that it is unwise to assume that bureaucracy will add much, if anything, to well-tried and evolved systems even if such systems are not perfect. If medical auditing is ever tried in the United Kingdom let us hope that it will be conducted as a properly controlled experiment and that the results will be evaluated by reputable representatives of all, not just a section, of those people concerned with medical care.—I am, etc.,

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SIR,—I have just read with great interest the symposium on medical audit (16 February, p. 271).

The principle, of course, is good. Self-examination is an age-old discipline propounded by Dr. A. K. Thould's medieval church even before it was medieval. I agree with Dr. Thould that rigidity is the greatest danger, especially in general practice, which by its very nature must be flexible if it is to survive in its true and necessary state. One of my greatest fears is that with the imminent reorganization of the Health Service general practice will be submerged in a

welter of irrelevant statistics poured out by a top-heavy, over-powerful, and inexperienced administrative body and that when it re-emerges it will be an emasculated service, part mini-specialist, part public health, and in its entirety not general practice in its true sense. Doubtless my consultant colleagues have similar fears for their particular specialties.

There are certain basic principles of medical practice which must be held constantly in mind when a medical audit is being held:

(1) The healing of the sick and prevention of disease. A platitude, one may well say, but is there any one of us who could truly deny that when bogged down under the administrative minutiae of medicine today he tends to forget this, even if only for a short moment?

(2) Complete liaison between consultant and G.P. If (1) above is to be effective, this principle is essential. It has happened in the evolution of medical practice that the consultant treats the disease whereas the G.P. treats the patient. In fact the G.P. must, like the Catholic priest, be oriented to treat the whole man. If there is to be this essential liaison, the present Cogwheel system must be greatly improved and include the G.P. as an equivalent cog to the consultant, each being a principal in his own right and master of his trade.

(3) The physician or surgeon must be master in his own house. The doctor is the head of the house in the medical family. He is the principle worker and "bread-winner" in the sense of providing healing, so he must also be the maker of decisions, the ultimate authority. He must not for the sake of an easier life or for convenience relinquish this authority to other members of the family, particularly to the administrative organization. An ideal concept, one may well say, already lost, but the basic principle remains.

There are many other basic principles that one could enlarge upon, such as adequate time, adequate facilities, time for recreation, etc., but most of these occupy our waking thoughts perpetually and time need not be spent on them here. One basic principle, however, will bear repeating ad nauseam—unity in the profession. It is tragic how we let ourselves be fragmented into smaller dissident groups each fighting for our own little kingdom, whereas united we would be an effective body in improving the state of medical practice, an authority to be reckoned with and not subjugated to political or bureaucratic expediency.—I am, etc.,

DAVID HOOKER

Truro

Current Practice in Tetanus Prophylaxis

SIR,—With the free availability of human antitetanus serum there will be renewed interest in the methods of tetanus prophylaxis.

The widespread use of antitetanus serum (A.T.S.) prepared from the horse dates from the first world war and resulted in a considerable reduction in the incidence of tetanus. Since 1963, when Cox and her colleagues¹ in Sheffield wrote their paper, the emphasis has changed and we were of the opinion that current practice in England followed her views. However, discussion with our colleagues indicated that this did not seem to be universally accepted. It was therefore decided to find out the current methods of prophylaxis, in the non-immune patient, in use in casualty departments in Britain.

A questionnaire was sent to 63 members of the Casualty Surgeons' Association in

Great Britain. Forty-nine of these replied. Forty-five stated that they never used A.T.S. (horse) in tetanus prophylaxis but advocated antibiotic prophylaxis, usually penicillin associated with wound toilet. Twenty-two of the doctors stated that they did not see a use for A.T.S. (human) even if it was readily available, but the four who used A.T.S. (horse) said they would use A.T.S. (human) if it was freely available. Twenty-one others declared an interest in A.T.S. (human) and felt that there might be a place for its use in selected cases.

A recent leading article in the *Lancet*² announces the availability of this human serum but gives only general indications for its use. It is evident from the above survey that there are no generally accepted indications for the use of A.T.S. (human) in tetanus prophylaxis and that the most common prophylactic procedure is surgical debridement with chemoprophylaxis.—We are, etc.,

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¹ Cox, C. A., Knowelden, J., and Sharrard, W. J. W., *British Medical Journal*, 1963, **2**, 1360.

² *Lancet*, 1974, **1**, 51.

Death from Accidental Potassium Poisoning in Childhood

SIR,—I should like to report the fatal poisoning of a small child by Slow-K tablets. Overdosage by intravenous potassium is a well-known hazard, but there are few reports of fatal poisoning by any form of oral potassium, and none hitherto of death due to ingestion of Slow-K.^{1,2}

A 15-month-old boy was admitted soon after midnight almost moribund. He came from a chaotic family and had been left for the evening in the care of a bed-ridden and demented great-grandmother who had not noticed that her Slow-K tablets had got mixed up with the Smarties he was eating. He swallowed at least eight tablets and sucked the sugar coat off about 30 more that were found scattered around him, together with more unsucked tablets and with Smarties. He vomited and became unconscious and lay for several hours before being taken to hospital. He was then flaccid and cyanosed, with shallow respiration, quiet heart sounds, and peripheral circulator failure. He was dirty but well-nourished and normally developed. An electrocardiogram (see fig.) suggested gross hyperkalaemia,

which was confirmed by a serum potassium level of 9.9 mEq/l., with sodium 138 mEq/l., chloride 120 mEq/l., and urea 22 mg/100 ml. He was treated with intravenous dextrose, calcium gluconate, and sodium bicarbonate, with intragastric sodium polystyrene sulphonate, and by peritoneal dialysis, but he died 75 minutes after admission. His serum potassium had by then risen to 14 mEq/l. At necropsy eight Slow-K tablets, partly dissolved, were recovered from his stomach; the kidneys appeared normal. There was no evidence in the home or at necropsy that he had taken any other type of tablets, and there was no salicylate in his serum.

Excess ingestion of potassium rarely produces lethal serum levels,³ probably because it is counterbalanced by the vomiting and