distance of not less than 15 ft (4·6 m) from the eye, which gives some indication of the velocity of these flying particles and the danger of watching such work in progress.—I am, etc.,

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An Integrated Child Health Service

SIR,—I hope that many have read and approved the article by Drs. F. N. Bamford and J. A. Davis (*Supplement*, 20 January, p. 20). The need for a modified, expanded, and integrated service to meet the changed pattern of child health and to provide an effective medical contribution to those who at present receive only token attention, or even none at all, has been recognized by some of us for several years. If professional attitudes had been more favourable, comprehensive child health services would have evolved before now. The current spate of reorganization stimulates hope that the time is ripe for such integration. Administrative changes alone, however, will not be sufficient. Attitudes must change. In particular there must be wider appreciation of the value of the promotion of optimum health and development for all children, recognition of the value of developmental stimulation and guidance, and acknowledgement that the paediatrician grappling with the multifaceted problem of a disabled child in the community requires skills just as complex and demanding as those required of a hospital-based paediatrician focusing upon a problem in depth.

Many things can and should be done. The more important are as follows: (*a*) Increase undergraduate teaching of child health and development. The introduction of child development and behavioural sciences into the preclinical years is praiseworthy, but must be matched by practical demonstrations of developmental paediatrics in the clinical years. (*b*) Accept that the promotion of child health is a basic part of medical practice and not just another item to be added on a fee-for-service basis. (*c*) Plan and make available vocational training programmes for the many paediatricians required by the community child health services. (*d*) Create a journal of child health and development as a focal point of the multidisciplinary activities in this field. It is truly amazing that no journal which really meets the requirements exists in this country.

Obviously some of these are long-term aims, but there are many items on which we can begin this very day if we so wish. If we want our children to have the best prospects for health and development, we must work for these changes ourselves. We cannot sit back and hope that they will suddenly appear as if by an administrative sleight of hand.—I am, etc.,

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P.B.I./E.T.R. for Routine Screening of Thyroid Function

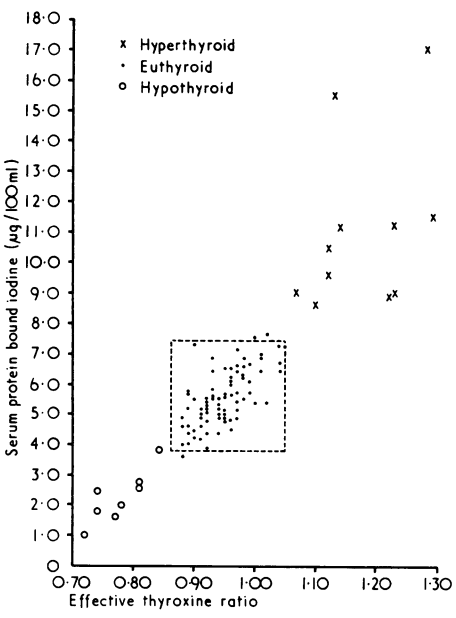
SIR,—As members of an endocrine unit with heavy clinical commitments we require a reliable screening test of thyroid function. During 1972 2,000 patients were screened for thyroid disease with an automated serum protein-bound iodine (P.B.I.) estimation (normal range 3·8-7·4 μg/100 ml, batch-to-batch variation 3%), and the effective thyroxine ratio (E.T.R.)[1] determined with a kit supplied by Mallinckrodt Nuclear (U.K.) Ltd., (normal range 0·86-1·05, batch-to-batch variation 3%). One thousand of these patients were seen in this unit.

Cause	Raised P.B.I. Normal E.T.R.				Normal P.B.I. Raised E.T.R.				Normal P.B.I. Lowered E.T.R.				Lowered P.B.I. Normal E.T.R.			
	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
Pill ..	13	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–
Pregnant	5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Iodine contaminants	14	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Antithyroid drugs ..	4	–	2	–	–	–	1	–	1	–	–	–	2	–	–	–
Non-thyroid drugs ..	4	–	2	–	3	–	–	1	3	–	–	1	1	–	–	–
Radioiodine-treated	4	–	–	1	–	–	–	–	–	–	–	–	–	1	–	1
No apparent cause ..	5	–	–	1	3	–	–	–	1	1	–	–	1	–	–	3

Final clinical diagnosis: A = euthyroid; B = hypothyroid; C = hyperthyroid; D = still awaited.

The relation between these two parameters in a consecutive series of 100 unit patients is shown in the figure. Patients undergoing treatment with thyroid hormones or antithyroid drugs and those known to have thyroxine-binding globulin abnormalities or iodine contaminants have been excluded. The correlation between E.T.R. and P.B.I. is high, as might be expected on theoretical grounds.

The findings in the 81 patients out of the whole series of 1,000 in whom the P.B.I. put the patient into one clinical category while the E.T.R. put the patient into a different category are shown in the table. For the purpose of this analysis the normal ranges have been strictly applied; no allowance has been made for the error on each result.



It will be seen that the E.T.R. fits the clinical diagnosis in all patients with quantitative changes in thyroxine-binding globulin capacity or with known iodine contamination. In the remainder, who form only 5% of all patients seen in this unit in one year, neither test has a clear diagnostic advantage.

The cost of a single P.B.I. determination is approximately 10p, and that of a single E.T.R. determination is approximately 110p. One must ask, therefore, whether the additional information obtained from the E.T.R. justifies its routine use for all patients suspected of having thyroid abnormalities.—We are, etc.,

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1 Thorson, S. C., Mincey, E. K., McIntosh, H. W., and Morrison, R. T., *British Medical Journal*, 1972, 2, 67.

Non-pharmacological Influences on Therapeutic Efficacy

SIR,—Interactions between doctor and patient and the nature of the treatment environment are non-pharmacological variables which may influence the objectivity of drug evaluations and affect the results of clinical trials.[1] The drug treatment of essential hypertension seemed to us a suitable medium for studying the effect on therapeutic efficacy of the doctor's attitude, and we therefore decided to carry out the study reported here. It was designed only to discover whether misleading information to the patient on the progress of treatment could affect the well-known hypotensive action of certain established hypotensive drugs.

Twenty-one hospital inpatients suffering from essential hypertension were studied. Antihypertensive treatment was not started until five to seven days after admission, when the patients had settled down and basic blood-pressure levels were established. They were then randomly divided into two groups, 10 in group A and 11 in group B. They were told that they would be given a new, effective drug against high blood pressure. No patient was given a drug which he or she had had previously and might recognize. Treatment was continued for from six to eight days and the drug dosage was not altered throughout. Each day between 8-9 a.m. the patients' blood pressures were measured by one of us (K.S.), always with the same sphygmomanometer. Patients in group A were told that their blood pressure had not changed and the drug was not yet effective. This was noted on the chart hanging at the end of the bed and accessible to the patient, while the true blood pressure values were recorded elsewhere. Similar information on progress was conveyed to each patient by the consultant on his round later in the day. An identical procedure was car-

ried out with the patients in group B, except they were told that the new drug was acting and that their blood pressure had decreased.

The true blood pressures, all of which showed decreases, were recorded each day as percentages of the patient's basic systolic and diastolic levels established before treatment began. The mean of these percentages were then taken for each patient in each group and the average of these means taken as representative of each group for comparison with the other group. These showed that in group A at the end of the treatment the systolic blood pressure was 90·8% of the pretreatment level and the diastolic pressure 93·0% of the pretreatment level. The corresponding figures for group B were 95·8% and 97·2%. The differences in the systolic and diastolic values between the two groups were not statistically significant ($P > 0·1$ and $> 0·2$).

Our results in this short trial show that positive or negative information given to the patient does not influence the changes of blood pressure produced by effective hypotensive agents. Therefore the doctor's attitude toward the patient probably does not affect the evaluation of antihypertensive drugs.—We are, etc.,

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1 Freund, J., Krupp, G., Goodenough, D., and Preston, L. W., *Clinical Pharmacology and Therapeutics*, 1972, 13, 172.

Nitrazepam Nightmares

SIR,—The letter from Dr. Frances M. Taylor (13 January, p. 113), about vivid and painful nightmares following the administration of nitrazepam is interesting, and the occurrence of such effects could, in certain circumstances, have far-reaching consequences. Vivid dreams or nightmares after the taking of nitrazepam are commonly mentioned by patients, and appear to differ from those produced by other hypnotics in being less abstract and more frequently remembered on waking. Many doctors and other professional people who are in the habit of making the overnight journey by rail-sleeper between Scotland and London take nitrazepam to ensure a night's sleep with little hangover, so that they can concentrate at their meetings the following morning. A number have mentioned their vivid dreams. One colleague dreamed a whole lecture which he was going to give the following week and recognized some members of his audience. At a particular stage in this dream one of the audience, who was in a certain position in the front row, disappeared through a hole in the floor, and when my colleague subsequently gave the real lecture he was most interested to see what would rally happen at that point in his peroration. Somewhat to his disappointment the lecture went without a hitch. The dreams sometimes vaguely link up various incidents that occurred the previous day or connect them with occurrences that are known to be about to take place. It is not clear whether diazepam may have similar effects or whether it has been merely coincidence that patients taking diazepam have been observed to waken during a ward round with similar well-remembered dreams.

The important point, and the reason for the writing of this letter, is to remind physicians treating influential patients that throughout history some men in very important positions have allowed their dreams to influence their actions, and the same is no doubt the case in modern times. If a world leader who was influenced by such fantasies were to dream, as a result of taking nitrazepam or a related drug, not that a member of his audience was going to go through the floor, but that his troops were going to go through a hole in the defences of the enemy or that he himself was divinely inspired to take a certain course of action, the consequences obviously could be serious. The doctor who prescribed the tablets might unwittingly have changed world history, and not necessarily for the better.—I am, etc.,

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Nurses for Nursing

SIR,—Many will admire Dr. R. A. Binning's touching faith in the ability of the Salmon structure to solve the problems of the nursing profession in this country (20 January, p. 176) and some may share his wish to protect the system from all criticism for a three-year period. Those of us who depend on the availability of skilled and highly trained practical nurses to look after our patients are inclined to be less optimistic.

At a time when whole wards are closed and non-emergency admissions are banned in teaching hospitals for weeks on end in winter because of nursing staff shortages one is bound to wonder where all the potential disciples of "teaching, the law, medicine, and industry" are hiding, who should by now have been attracted by the Salmon structure into the nursing profession. I suggest that the nursing profession does not need frustrated lawyers, doctors, and business executives, it needs many more nurses—that is, young women trained in the discipline of nursing sick people.

Many hospital doctors feel that the main reason for the low state of morale and chronic lack of recruitment in the nursing profession is that the only way nurses can obtain promotion or improve themselves financially is by giving up nursing. The top-grade ward sister or the nurse who has taken the trouble to acquire special skills such as intensive care, theatre work, or haemodialysis can advance in her career only by making the decision never to look after patients again. Instead she must sit in an office or walk round the corridors trying to be busy when in reality she is often unhappy and frustrated. A well-trained surgeon might feel similarly frustrated if told that the only way to increase his salary was to stop operating and retire to an administrative desk to make decisions about the distribution of surgical beds or the training of surgical registrars. The problem at the moment is not lack of nursing managers or nursing committees but lack of practical nurses to look after patients. Most wards run very well without the help of a "Salmon 7" provided that the sister is given enough nurses to do the job.

On common-sense grounds it seems likely that one way to increase the numbers of practical nurses is to provide financial rewards for a continuing career in clinical nursing. The present steady loss of skilled practical nurses into the administrative grades could be halted by giving higher pay and promotion to those with higher degrees of skill and experience. This has been suggested before by experienced members of the medical profession, and as a principle it operates very successfully in other walks of life. I fear that if we take Dr. Binning's advice to sit back and wait three years for the Salmon structure to solve its "teething troubles" we are likely to witness a total collapse of the traditionally high standard o hospital medicine in Great Britain for which the nursing profession has hitherto been in large part responsible.—I am, etc.,

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Care of the Dying

SIR,—Sir Keith Joseph and his Department are to be complimented on the convening of the conference on "Care of the Dying" reported in your issue of 6 January (p. 29). All speakers were agreed on the importance of the problems involved, but they tended to approach them from points of view not easily reconciled. As a silent listener to the speakers, I would agree that we need more suitable hospital accommodation, more education, and more centres of research. All increased provision, however, will be only as good as the sensitivity and competence of the staff allow it to be. We heard much of the failures of the family doctor in this field, no doubt on occasion all too true. Yet some of us could find bereaved relatives, or even patients—not notable or important people—prepared to spell out a success story in what had been achieved by them and for them. On occasion the family doctor has been able to contribute both physical treatment and support of the whole person, knowing him both in vigorous individuality, perhaps over a number of years, and in his present extremity.

The conference failed to distinguish between the various standards and varieties of family medicine available, ranging from the city practice with the surrounding forces of urban depersonalization to the comprehensive medicine practised in more peripheral districts. However, I believe that the key to helping the dying patient lies in well-organized groups of doctors closely in touch with their nurses and able to discuss the day-to-day problems of care in their service to the patient. If to this arrangement is added the bonus of general practitioner hospital beds, it should be possible to manage all but the most difficult cases of terminal care. We shall need more education and sensitivity but I wonder whether a visitor from a specialized hospice or institution would not undermine our own confidence that we can undertake the task. There is much mutual support in a happy group practice, and responsibility is the life blood of medicine.

In brief, then, I believe that an extension of the tendency to form groups of doctors with attached nurses, perhaps some day social workers, could go a long way to improve care of the dying, with availability of hospital beds for family doctors' use. We need to accelerate that tendency which is already in progress, of which too few hospital