receiving long-term medication. Wootton⁶ noted that there appeared to be little effort by medical disciplines to ensure that medicines and medications were applied correctly and consequently patients adopted haphazard routines about the time spacing of their drugs. It is well known that digitalis toxicity is increased in patients who also receive oral diuretics.⁴ More generally, multiple drug treatment in the aged carries a particularly enhanced likelihood of drug intoxication and this risk is increased in patients with impaired intellectual function. We have used the set test² as a readily available index of reduced mental acuity and suggest that it provides a means of identifying a group of elderly patients in whom the risks of drug side effects may be increased. Since the test can be carried out by nurses or health visitors it could provide a useful screening tool.

Hall⁵ advocated quarterly review by the general practitioner of all elderly patients receiving repeat prescriptions because their ability to handle drugs by absorption, detoxication, and excretion is reduced as the efficiency of their body and individual

organs lessens with age. The doctors in the study practice have been aware of these problems and are creating a filing system to ensure regular reappraisal of those patients on long-term drug treatment.

The observations and data recorded, however, suggest that reliance on self-referral by elderly infirm patients, whether on long-term treatment or not, will not guarantee adequate supervision of their medical needs.

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Around Europe

Improving the hospital service?

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By comparing experiences gained from three years in a Dutch peripheral hospital and a similar period in a British hospital several ideas emerged for improving the hospital sector of the NHS. All figures refer to 1972. The Dutch hospital, which is a semi-permanent building with 240 beds, was opened in 1965 to meet the needs of an expanding town of 32 000 people and its surrounding area. There is a high level of accommodation for the general specialties including neurology, psychiatry, and obstetrics, with a large outpatient wing adjacent to the radiology and pathology departments. The building is now being replaced by a multistorey block. The UK hospital comprises two units about a mile apart with 350 beds, of which 160 are for geriatric and chronic sick patients. One hospital, built in 1900, contains geriatric and outpatient accommodation. On the second site a new surgical block was opened in 1972 with adjacent theatres but the remaining ward accommodation is in workhouse buildings dating from 1830.

Work load

A comparison of work load is important. The Dutch hospital's figures were greater in 1972 for total admissions, operations, and outpatient attendance. The average patient age, however, was lower and there were no geriatric or chronic sick beds. Given similarity in the overall figures one is justified in drawing conclusions when other data, such as staff employed, are wildly disparate.

Management and administration

The Dutch hospital is largely autonomous and controlled by a

voluntary management committee, which is typical of nonteaching hospitals in Holland (fig 1). Administration is in the hands of a medical, a nursing, and an economic director. The last is responsible for most day-to-day decisions and runs the hospital as a business concern, balancing income, which comes from treating patients, against expenditure, including the replacement of borrowed capital. A much more complicated organisation controls the British system (fig 2). Since 1974 local medical care has in theory been given to the district management team, but it has no real control over capital development or expenditure.

The replacement of the present Dutch hospital exemplifies the difference in approach. The management committee had plans prepared and presented them to the Ministry of Health for necessary approval. This was given only after a prolonged struggle (since there has been overprovision of hospitals in Holland), in which the management committee was supported by the local mayor and council. They have been able to build on a new site and the committee hopes to recoup in part by selling off the old one which is close to the town centre.

The Dutch hospital managed its own affairs with 19 people whereas the non-independent British hospital employed 49. This latter number has increased since NHS reorganisation, and of course does not include the large numbers employed at area and regional levels. A compact modern building, more mechanisation, and a more flexible approach to job demarcation operates to the advantage of the Dutch hospital. As a result, only 55 ancillary staff were employed, whereas the British hospital employed 190. Undoubtedly the necessity for the economic director to balance his books, and his having the necessary powers to do so, make for greater efficiency especially as the wages paid to Dutch staff are higher than those of their British counterparts.

Medical and nursing staff

Most Dutch specialists are independent contractors bound to one hospital, paying for the use of its facilities and for their secretarial staff, with remuneration on an item-of-service basis. Despite these expenses their incomes are much higher than those of their UK counterparts. On the other hand, they are more often called outside normal working hours, since, at least in the hospital under consideration, nearly all patients are seen on admission by a specialist. Much of

this work is performed by juniors in British hospitals and the numbers employed reflect this. The Dutch hospital had 25 specialists, of whom five had other commitments and two to three junior staff, whereas the UK hospital had 28 consultants, 21 with duties at other hospitals, and 16 junior staff.

There are considerable differences in the training and use of nursing staff. All Dutch nurses are trained to the level of a British SRN, there being no SEN equivalent, and nearly all work full time. By employing specially trained doctors' assistants who manage outpatient clinics and also help in the operating theatre and recovery room, nurses can largely concentrate on ward work and fewer per bed are employed than in the British hospital—although the intensive care unit in the latter and the higher average patient age must also be taken into account.

The Dutch nurses earned, in 1972, about twice as much as their British counterparts and because of the limited number of junior

FIG 1—Administration of Dutch hospital

short, and patients frequently arranged admission to their own requirements. By paying supplementary insurance cover they could obtain a well-furnished room but apart from this all patients were treated the same whether they were covered by the State-registered Ziekenfonds or were selfinsured. (The latter is obligatory for those whose incomes exceed £3500 approximately per annum.) The UK hospital compares reasonably as regards the surgical wards but the remaining parts of the hospital are definitely inferior. Its division into two units means that patients may spend a considerable time going from the outpatient department to the pathology laboratory one mile away. The Dutch patient also had the advantage of being admitted

FIG 2—Administration of UK hospital

staff, had more responsibility and scope. They were helped by the local authority in obtaining modern, reasonably priced accommodation.

Paramedical staff

The numbers and quality of physiotherapists, radiographers and other paramedical staff, were similar in the two hospitals. Two psychologists in the Dutch hospital played an active part in treatment, which reflects a difference in national practice. Qualified staff were again paid substantially more than their British counterparts and recruitment appeared less of a problem, especially in the physiotherapy department.

Staff-management relations

Comment on staff-management relations is particularly subjective but I think that a better working atmosphere obtained in the Dutch hospital. In Holland a feeling of involvement in the hospital was promoted by a workers' council, obligatory under Dutch law, which met once a month with the directorate and definitely influenced policy. Representative bodies exist in the UK hospital, but they suffer because of the diffuse nature of the authority to which representation must be made. The Dutch management also encouraged a feeling of participation by presenting all personnel with a substantial Christmas box, providing a free lunch on festive days, and by supporting a cabaret evening when student nurses complete their examinations. These activities would be curtailed in the UK on grounds of expense but could be justified in terms of staff morale.

The presence of one person—the economic director—with whom problems could be worked out by discussion without reference to higher authority is an advantage in Holland. The small size of the decision-making group also ensured good interpersonal contact and less memoranda, directives, and other paperwork than are the rule in the UK.

The patient

The Dutch hospital offered a high degree of comfort and privacy—there were no open wards. Waiting times and waiting lists were

and treated by a trained specialist whom he saw daily. Thus he does better than his British counterpart who is admitted and in acute cases treated by a junior doctor quite likely to have been trained abroad and to be less than fluent in English.

In two specialties, obstetrics and ENT, the UK hospital cannot offer adequate facilities: obstetric emergencies have to be transferred from a maternity home to a hospital 13 miles away. Children have to travel nine miles or more for ENT operations which involves expenses for relatives which do not appear on the balance sheet.

Costs

In 1972 the Dutch hospital cost £1.8 million and the UK hospital £1.4 million. The former figure includes repayment on borrowed capital and is further inflated by the declining value of the pound. But since wages make up 60-70% of both totals the much smaller staff of the Dutch hospital earned more per head, and my impression was that this led to a higher level of recruitment. Nationally Holland spends more than the UK on health care.

Conclusions

The introduction of a similar system in the UK would require a radical and difficult reorganisation and the Secretary of State has rejected an item-of-service system on grounds of cost. This is open to question but there is still scope for the introduction of some of the better elements of the Dutch system. Local autonomy—at present minimal—could be increased and local administrators allowed to plan the development of hospitals in the long term with the right to dispose of unwanted sites and thereby acquire capital for further development. By giving greater financial independence and power to local management one would hope to improve efficiency especially in the manpower sector. Extra money could be attracted to the chronically underfinanced NHS by transferring higher income groups to private insurance. This might prove acceptable to those involved if they were assured of an improvement in the service as a result of their contributions.