to follow his normal occupation. Whilst this may be valid at the extremes of health and ill health, in the great majority of cases the decision is far from simple; the doctor must rely upon the patient to supply relevant details about his job, and these are seldom provided in an unbiased manner. However, even medical opinion itself is inconsistent, as the survey in the USA by Moss *et al.* (1957) clearly demonstrated. Thus, after an uncomplicated inguinal herniorrhaphy in a healthy man of 50, a sample of 229 doctors (surgeons, GPs and industrial physicians) recommended times before return to work ranging from 1 to 10 weeks for light work and 2 weeks to 6 months for heavy work. Since it seems that at present we as a profession are unsure about the medically desirable period of absence, we must first attempt to set our own house in order.

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## The Impact of the Rehabilitation Services on Sickness Absenteeism

In 1912 a Committee of the British Medical Association reported on the results of treatment of 3,000 fractures, stressing that a good anatomical result did not necessarily mean a good functional result. Mal-union was present in 40% of the cases.

I have studied all the major reports concerning the need to develop rehabilitation services from 1935 to 1956 (*see* bibliography) and at the present time there is still another government enquiry being carried out into the need to develop the rehabilitation services of this country. A survey of all these reports appears to show that, except in times of war, more work has been expended on producing the reports of committees than in taking practical steps to resolve the problem. This does not imply that nothing has been done in the intervening period, but what has been achieved has been on a piecemeal basis. The question of rehabilitation of patients as a whole in this country has not so far been tackled on a national basis. However, there has been a gradual growth in our appreciation of the problem, a gradual increase in the scope of the investigations, a shift in emphasis from the simple fracture in 1912 to the entire field of rehabilitation in 1956.

It cannot be overlooked that the whole social attitude to illness has changed in this country. Illness has become respectable and, with the many statutory benefits now freely available, it may not necessarily prove to be financially unrewarding. Indeed, the unskilled labourer, disabled as the result of an accident at work, with a large family, may find the difference between his net weekly wage and his total benefit is scarcely appreciable.

It is true that the treatment of each patient must remain the responsibility of his own doctor. However, accepting this does not, in fact, produce the best answer as far as the individual patient is concerned. It must be stressed that rehabilitation should be initiated early in the treatment, and its use only as a salvage service is to be deprecated. Furthermore, GPs and hospital doctors alike should be much more aware of the social, industrial and domestic problems of gainful occupation, when disease or injury at an early stage is known to project difficulties in this area.

One of the main problems is to determine the yardstick by which the efficiency of the present services can be measured. This is difficult to achieve, but in people of working age the only relevant figure is that which states the total disability period for any particular patient; that is the time from the accident or onset of illness until the patient returns to work. In this respect there is an apparent degree of complacency on the part of the medical profession. There is certainly evidence that it takes longer now to recover from a fracture of the shaft of the femur than it did in 1914, despite the fact that antibiotics and internal fixation (to mention only two developments) should have made a significant difference in the intervening years.

### *Fractures of the Tibia and Fibula*

There is a tendency to equate the need for intensive rehabilitation with the needs of patients who are severely and probably permanently handicapped. In order to dispel this implication, I have carried out an analysis of 233 patients who attended the Medical Rehabilitation Centre with

fractures of the tibia and fibula, excluding those who had multiple injuries and cases with non-union (Table 1).

These patients were probably typical of all those suffering from this disability. They had all been treated in hospital prior to attending the Centre and their average attendance after discharge from hospital was two or three times a week for a half to one hour on each occasion. The rest of the time they remained at home waiting to get better, and, in fact, waiting nearly nine months before being fit to resume work. There is always strong pressure to empty a hospital bed but these patients had not occupied one for any significant length of time. The drive to terminate outpatient treatment is seldom so apparent.

*Table 1*

**Analysis of 233 patients with fractures of the tibia and fibula excluding multiple injuries and cases with non-union**

| | *Total disability period (weeks)* | | | |
|---|---|---|---|---|
| | *Referred from teaching hospital* | *Referred from non-teaching hospital* | *All* | *Time spent at Centre (weeks)* |
| 1960 | 27·7 | 37 | 32·3 | 7·8 |
| 1961 | 30 | 41·3 | 34·7 | 8·0 |
| 1962 | 32·6 | 34·8 | 33·3 | 7·1 |
| 1963 | 43·7 | 53·9 | 35·8 | 8·1 |
| 1964 | 32·6 | 34·2 | 33·5 | 9·0 |
| 1965 | 31·2 | 40·2 | 35·2 | 9·0 |
| 1966 | 30 | 47·7 | 39·1 | 8·7 |
| 1967 | 37·5 | 41·8 | 40·2 | 11·7 |

Table 1 shows the total disability periods of patients referred from teaching and non-teaching hospitals; the average was 32·3 weeks in 1960 and gradually increased to 40·2 weeks in 1967. Patients from teaching hospitals were referred for intensive rehabilitation significantly earlier than those from non-teaching hospitals. Table 1 also shows that approximately nine weeks of the total disability period of these patients were spent at the Centre. It is interesting to note that there has not been a corresponding increase in this period over the years compared with the total disability period, and this suggests that the gradual rise in the total disability period is non-medical in origin and may well be associated with the impact of the welfare state on the patient.

*Speech Therapy*

At the Centre we are interested in the problems of hemiplegic patients and we have paid particular attention to the need to treat such patients intensively. A major problem is the presence of a speech defect and we have found that it is essential to provide speech therapy at a realistic level. Most of the patients who have had speech therapy before attending the Centre have had this only once or twice a week for an hour or less. Between 1957 and 1962 the patients at the Centre had speech therapy three times a week (non-intensive speech therapy). From 1963 until the present time patients who require it have had intensive speech therapy three times a day, five days a week (Table 2). The speech therapist was not involved in selecting patients in either group.

*Table 2*

**Intensive and non-intensive speech therapy patients of working age with hemiplegia (1957–69)**

| | *Dysphasia* | | *Dysarthria* | | |
|---|---|---|---|---|---|
| | *Men* | *Women* | *Men* | *Women* | *Total* |
| 1957–62 (non-intensive): | | | | | |
| No. of cases | 98 | 19 | 26 | 99 | 152 |
| Men returning to work | 21 | — | 6 | — | 27 (22%) |
| 1963–69 (intensive): | | | | | |
| No. of cases | 60 | 31 | 18 | 1 | 110 |
| Men returning to work | 34 | — | 5 | — | 39 (50%) |

Of male patients who received non-intensive speech therapy 22% returned to work; the percentage of male patients who returned to work after intensive speech therapy was 50%. I think it is reasonable to assume, in view of the fact that both groups received equivalent treatment in other respects at the Centre, that the reason for this increase was entirely due to the level of speech therapy they received. It also follows that it is not appropriate to state that a patient is not benefiting from speech therapy if it is not being given to the patient at the appropriate level.

*Compensation Cases*

Many of these patients are disgruntled, have been under treatment for long periods of time and have made little progress once they have achieved sufficient function to discharge their social and recreational obligations. The majority protest vigorously that they are not interested in the money and that their only desire is to lose their symptoms. Again, many have been rejected by the hospital concerned and the action has been rationalized by the observation that they are unlikely to progress until their compensation case has been settled. This defeatist attitude swells the ranks of the disabled unemployables. It is also based on a false premise because there is ample evidence to show that many patients do not, in fact, lose their symptoms after their case has been settled. This is particularly true if a long period of time is allowed to elapse before settlement is achieved.

Particular attention has been paid to this problem at the Centre, and an analysis of 2,786 patients shows no significant difference in the number who returned to either employment or training between the group of 1,535 patients who had an unsettled compensation case and the group of 1,251 patients who had not such cases

*Table 3*
**Analysis of disposal of patients treated and discharged from the Centre 1955–69**

| | *All patients* | | | *Patients with traumatic disabilities* | | | |
|---|---|---|---|---|---|---|---|
| | *No. of cases* | *%* | | *Compensation claim* | | *No compensation claim* | |
| Original work | 2,585 | 41·4 | | 718 | | 772 | |
| Different work | 1,258 | 20·2 | | 465 | | 208 | |
| Industrial rehabilitation unit | 25 | 0·4 | 79·6% | 6 | 78·4% | 4 | 79·4% |
| Training | 59 | 0·9 | | 15 | | 10 | |
| Optimum function | 1,040 | 16·7 | | — | | — | |
| Admitted to hospital/treatment at home | 1,029 | 16·4 | | 240 | | 189 | |
| Self-discharge | 177 | 2·8 | | 52 | | 47 | |
| No progress | 79 | 1·2 | | 39 | | 21 | |
| Total | 6,252 | | | 1,535 | | 1,251 | |

(Table 3). This shows that, if the problem is attacked realistically and intensively, this factor has not the significance which it has when the problem is allowed to drift.

Patients who have sustained spinal lesions present a particularly difficult problem in that their symptoms are largely subjective and it is impossible to exclude them by investigation or examination. Because of this, the total disability period in 480 patients who had such lesions was analysed; 248 patients had had an unsettled compensation case and 232 patients had not (Table 4).

It was found, first, that the time under treatment prior to attending the Centre was significantly higher in the compensation group. Many factors may be involved, but it appears likely that this is symptomatic of the general attitude towards compensation cases, an attitude of *laissez faire*. In such cases the Centre tends to be used as a salvage service. Secondly, the time under treatment at the Centre was almost double in patients with a compensation case compared with patients who had no such problem. This can be attributed, at least in part, to delay in getting to grips with the problem and the fact that unless it is tackled they will not return to work (*see* Table 3). Thirdly, the most interesting figure concerns the total duration of disability in the two groups. This shows that the presence of a compensation case in this series produces a total average disability period of 35·6 weeks, whereas the group of patients without a compensation case shows an average total disability period of 21·9 weeks (Table 4). The patient with a compensation case is suffering basically from an anxiety neurosis. Any step which diminishes his anxiety evidently improves the prospect of recovery. It seems unreasonable and contrary to basic human nature to expect a man to lose symptoms which workmates, relatives and friends have assured him are worth large sums of money. In this series very few conscious malingerers have been identified. The patient with an amputation seldom has his recovery impeded by a compensation case. However long the interval between the accident and settlement, he is still obviously disabled and has his disfigurement and prosthesis to prove it. A patient with an injury to his back must retain his symptoms and loss of function in order to establish his case. Every effort must be made to break the vicious circle whereby the legal advisers state that the action cannot proceed until medical treatment has ceased and the residual permanent disability assessed; subconsciously the patient retains his symptoms until the legal proceedings are completed.

*Table 4*
**Duration of disability, in weeks, of patients with and without a compensation claim and suffering from lesions of the spine, 1958–69**

| | *No. of cases* | *Prior to Centre* | *At Centre* | *Total time* |
|---|---|---|---|---|
| Compensation claim | 248 | 26·3 | 9·3 | 35·6 |
| No compensation claim | 232 | 16·6 | 5·3 | 21·9 |

The return to work of almost 79% of the patients with an unsettled compensation case was achieved as a result of team work. The attitude of the patient may have been altered by the environment of the Centre, and his unwarranted suspicions allayed by a firm and sympathetic approach. The regime of the Centre, whereby the patient is treated on a whole-time basis each week, helps each patient to determine for himself his level of functional capacity and this is particularly important. At all times an impartial attitude is maintained and the patient becomes conditioned to accept the advice offered in the course of full and frank discussion; this method of approach could not be adopted in a hospital outpatient department. There are no grounds for complacency; this problem is of considerable magnitude if it is considered on a national basis.

There appear to be strong grounds for altering the existing legislation so that liability must be established early and not left, as at present, to be settled concurrently with the question of damages, often two, three or more years after the accident. The passage of time must surely make the facts concerning liability more difficult to determine.

*Discussion*

There is no doubt that developments have resulted in the need to train more and more auxiliary workers whose roles are diversified to such an extent that their efforts may, unless properly controlled and orientated, actually delay the recovery of the individual patient.

Each group tends to view its role in relation to rehabilitation in a narrow and circumscribed manner, adding technique to technique. An inevitable result is to prolong the time taken to train each individual group. This development impinges on the individual patient, where it is quite normal for a host of trained personnel to be involved. In 1970 I pointed out that in the case of a typical middle-aged male patient with right hemiplegia and executive dysphasia, at least twenty-three different people were concerned with him before he was discharged from hospital, and no fewer than forty medical and paramedical personnel would be involved in his rehabilitation till he became a candidate for training or resettlement. These figures make no allowance for essential supporting staff.

How can the patient be best served if forty different people, or at least eight different disciplines, are involved? How many of these disciplines tend to work along parallel lines, neither seeking nor with the opportunity to co-ordinate their efforts? What is the result, in practical terms, so far as the patient is concerned, of the plethora of treatment and advice? Does it reduce the total disability period to an absolute minimum, or does it, by default, prolong it?

A tremendous gap exists between the facilities afforded to the patient by a properly organized medical rehabilitation centre and those afforded by the average general hospital. It is hard to believe that the establishment of the new district hospitals will significantly alter this problem, and indeed, there is every reason to expect that if these hospitals are built, each containing up to 1,000 beds, then the problem may become worse.

What is required urgently is a focal point which will draw the attention of all the many agencies concerned to the need for a co-ordinating effort to achieve the best possible results in the shortest possible time. In my opinion what is required is the establishment of medical rehabilitation centres in relation to each district general hospital. These centres would have their own identity within the curtilage of the hospital. They would provide rehabilitation, including assessment for selected patients, and the staff of the hospital would have no difficulty in maintaining an active interest in the progress of their patients. It would be desirable for the consultant in charge of such a centre also to be on the staff of the hospital or hospitals serving it and this would facilitate co-operation between the various people concerned.

The facilities of such a centre would enable the staff working there to function as efficiently as possible, and it would also allow those employed by local authorities or voluntary agencies involved in the problem to meet and agree a plan of action for each individual case. The centre would be available only to patients who required intensive full-time rehabilitation. Hospital accommodation could be provided for a small group of patients who could not be treated on a daily basis from their homes. The level of such accommodation would be closely related to the area concerned; in heavily populated areas the need would obviously be smaller than in rural or semirural areas. The value of such centres would become more apparent if the question of area health boards were decided and implemented, as they would be vital in establishing really effective liaison between the agencies concerned in each area (*see* Table 3).

I hope I have shown the impact of rehabilitation services on sickness absenteeism and highlighted the fact that such facilities are available in only a very small number of centres and hospitals in this country – indeed, they can be counted on the fingers of both hands. I hope also that this situation will not be allowed to continue for much longer.

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**Sir Walker Carter** (*Chairman, Criminal Injuries Compensation Board*): I feel rather like Daniel in the lion's den, since I believe I am the only one present who is not a doctor. However, I should like to put the views of those who have to turn pain and suffering into terms of money.