

**Papers read at the Scientific Meeting of the International Medical Society of Paraplegia held on 24th and 25th July 1964 at Stoke Mandeville Hospital, Aylesbury, Bucks., England.**

### **THE FUTURE OF PARAPLEGICS\***

RESULTS OF A SURVEY OF THE HOME CONDITIONS OF THE FIRST 250  
PARAPLEGICS DISCHARGED FROM THE CENTRE DE RÉÉDUCATION  
MOTRICE, FONTAINEBLEAU

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If specialised care now results in the survival of paraplegics, good social conditions (or perhaps better, good psycho-social conditions, because the problems are closely linked) are absolutely necessary for a decent life. However, the disability which increases the material requirements also lowers the income.

We became interested in the future of our patients, and consequently, with the help of the "Communauté Européenne Charbon-Acier" and of the Regional Service of the Social Security, we undertook a home survey of the first 250 paraplegics (males) who had been treated in our department and who had left it at least two years ago. The survey has been carried out by a social worker, well informed in such problems with a good psychological background. The following questions were investigated: living-conditions, transportation means, independence, occupational modalities (or reasons for not returning to work), familial and social conditions.

The result clearly confirms some facts which we had foreseen, such as the following: 29 per cent. of our patients cannot get out of their homes by themselves and more than a third have lavatories which they cannot use. Only 69 per cent. get out of doors every day. In spite of the length of time devoted to preparation (dressing, washing, etc.) and to travelling, 43.6 per cent. are working; 75 per cent. believe that they would be able to work.

Their health condition may be one of the factors which prevents them from returning to work, especially full-time; but other important factors are the lack of qualifications and the fear of curtailment of pension.

The occupations are mainly orientated towards mechanics, electrical construction, press industry, editing, industrial drawing and accounts.

While the veterans' pensions are often high, the civilians' income is usually low compared to their needs; half of the civilians have pensions of under 500 F a month, and the average earnings of the full-time workers are 547 F a month; 40 patients have no pension at all.

More than half of the paraplegics are married, 24 after the occurrence of paralysis; 6 are separated or divorced (4 are remarried); 13 children were born in paraplegic families. The presence of a child is often a factor of stabilisation.

The social worker who was in charge of the survey was perfectly welcome in all the homes but one, and the analysis clearly showed the psychological difficulties related to adjustment to the disability.

\* Abstract.

To conclude, if we agree that, for the majority of paraplegics, work is indispensable for physical and psychological reasons, we must also stress that health conditions and fatigability should be taken into account. Time and physical facilities should be left also for social life, leisure and nursing.

Occupational guidance and training have to be considered very early during the paraplegic's stay at the rehabilitation centre and the question of pension quickly cleared up. Multiple possibilities of work should be provided through the creation of occupational training-centres, protected workshops, and hostels (especially for tetraplegics). Part-time work and adjustment of working arrangements should be made easier.

Finally, social conditions and adjustment would be greatly improved if it were possible to grant to every patient an easily accessible dwelling, an adapted car, a second wheelchair for work, and if it were assured that neither the allowance for the help of an attendant nor the pension could ever be curtailed.

## RESETTLEMENT PROBLEMS OF PARAPLEGIC MINeworkERS

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THIS paper concerns a review of some of the principal problems of resettlement of paraplegic mineworkers during the period of the past 10 years. All the cases have been patients at the Spinal Injuries Unit, Lodge Moor Hospital, Sheffield. All were early admissions within 6 to 72 hours of injury and the majority came from the coal-mines of either the Yorkshire North Eastern or East Midlands Division of the National Coal Board. A few cases came from Northumberland and Durham, the Cumberland and West Lancashire Divisions. It will be noted that these coal-bearing areas surround Sheffield, which lies at the centre of the geographical area; and apart from the Cumberland and Durham groups all the mines are within 50 miles of the Unit, which thus obviates major difficulties in transportation.

Out of a total of 396 acute admissions, 127 came from mining accidents. It is interesting to compare the pattern of admissions over the 10-year period (fig. 1 and table I).

It will be noted that whereas the number of mineworkers varies within a fairly constant range, those cases of spinal injury from other causes show a steady increase. This is particularly noticeable in injuries due to falls and those due to road traffic accidents (R.T.A.). Nevertheless, injuries from mining accidents still account for 32 per cent. of all primary admissions at the Sheffield Spinal Injuries Unit. This trend is also shown in the incidence of admissions when reviewed as levels of injury (fig. 2 and table II). The steady rise in cervical injuries becomes clearly apparent.

In 1946 Nicoll reported that there were 11.4 cases per annum per 100,000 mineworkers. The incidence in the period 1954-63 must be very much the same. Nicoll reported that there was an early death rate of 30 per cent. within a period of three weeks and a death rate of 57 per cent. in the next two years. The comparative figures for 1954 to 1963 are less than 1 per cent. and 2 per cent. respectively.

The duration of hospital in-patient treatment averages less than six months