Long-term disability and return to work

K. SHEIKH, MB BS, MFOM, DIH
Clinical Epidemiologist, MRC Epidemiology and Medical Care Unit, Harrow

S. MATTINGLY, TD, FRCP, D.PHYS. MED
Medical Director, Garston Manor Rehabilitation Centre

SUMMARY. In a study of 2,113 physically or mentally disabled adults, an early return to stable employment was found to be largely dependent on two interrelated factors: motivation for work and the duration of unemployment before rehabilitation. If doctors refer such patients for medical and vocational rehabilitation at the earliest opportunity, they can help to reduce the period of unemployment and to restore patients' confidence and motivation.

Introduction

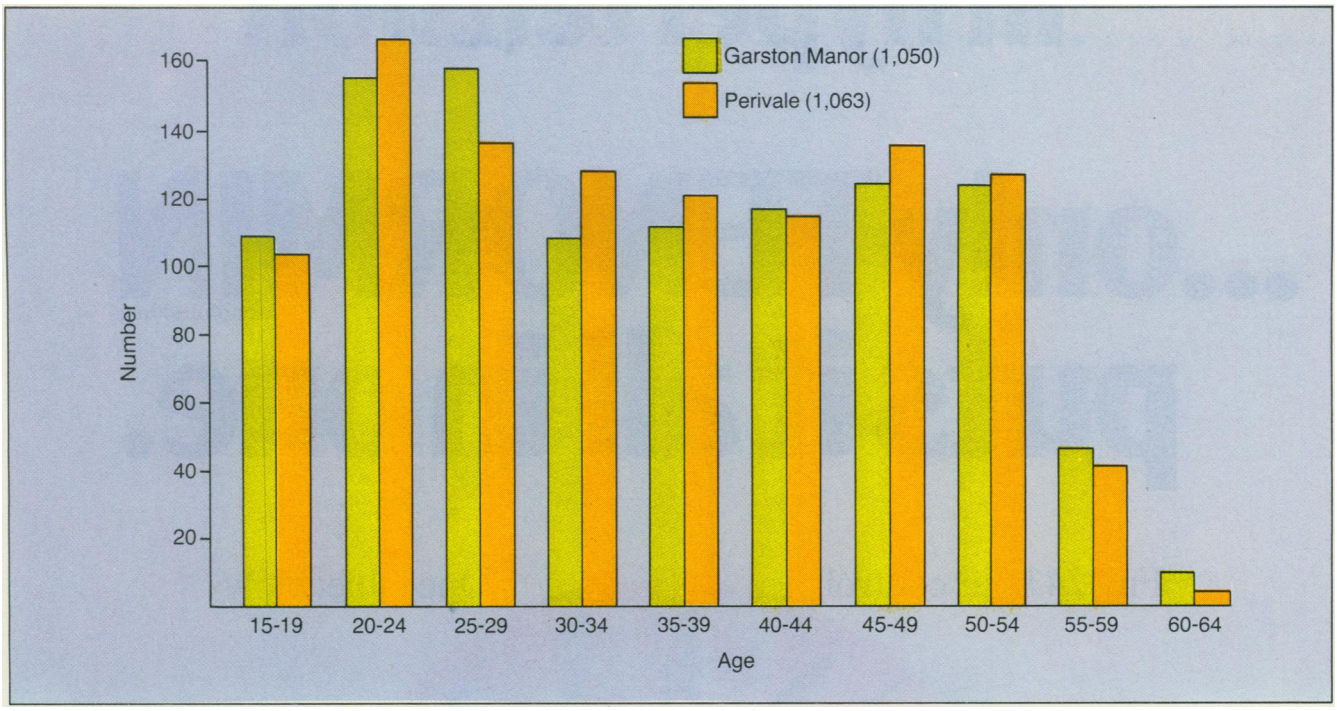
THE available data about unemployment due to sickness or disability are incomplete; not all the disabled and/or unemployed register with the government agencies concerned. From those known to the Manpower Services Commission, a major group numbering about 15,000 adults each year are assessed for work at 27 Employment Rehabilitation Centres (ERCs) (*Department of Employment Gazette,* 1978). In these physically or mentally disabled people, an early return to stable employment is largely dependent on what jobs are available, the completion of an ERC course, the level of physical disability, the duration of unemployment and the rehabilitees' motivation for work (Sheikh *et al.,* 1981). The first of these factors is beyond the control of those involved in the clinical management and rehabilitation of the disabled, but the rate of completion of ERC courses could be improved by better selection of the rehabilitees (Sheikh and Mattingly, 1981). Medical rehabilitation of people with physical disability also speeds up return to work (Copp, 1966). In order to improve the prognosis further, duration of unemployment and motivation must also be influenced. This paper presents data which show the independent effects of these two factors.

Methods

Between 1973 and 1975, 995 men and 55 women were discharged from Garston Manor ERC, Hertfordshire; during 1975 and 1976, 931 men and 132 women were discharged from Perivale ERC, London. These 2,113 rehabilitees were followed for up to three years in order to study the factors associated with an early return to stable employment. Details of personal characteristics, employment history, disability and the results of routine psychological and functional assessments were obtained from case-notes at the two centres. (Occupational psychologists at all ERCs use standard tests to estimate motivation for work.)

Follow-up was conducted by postal questionnaires which enquired about employment and vocational training and were sent 6 and 12 months after discharge and thereafter at yearly intervals. (Copies of follow-up questionnaires are available from the authors on request.) Out of the 2,113 rehabilitees, 94 (4 per cent) were lost to the one-year follow-up: 31 had died, 27 had left the UK, 30 could not be traced and 6 were in prison. Of the remaining 2,019 who were followed, 1,479 returned the completed questionnaires; information about a further 489 was obtained from other sources, mainly their general practitioners and local disablement resettlement officers (DROs). Data on employment and vocational training were known for 97.5 per cent of all those available for the one-year follow-up and for 99 per cent of those who had started training courses (trainees) and who were available for two-year follow-up. Some of the trainees were still in training or had only just completed training courses at the time of two-year follow-up. Thus, outcome in terms of return to work after discharge from the ERCS, or after training, was known for 1,928 rehabilitees.

Twenty-five independent variables (personal and social characteristics, medical and employment history and the results of assessments at the centres) known to be associated with return to work, and seven dependent variables (indicating an early return to stable employment) were analysed by univariate and multivariate



Age distribution of rehabilitees.

methods. The analyses provided a quantitative measure or score for the outcome of vocational rehabilitation, and independent correlates or predictors of the outcome. A good outcome, that is an early return to stable employment, was found to be valid in terms of long-term employment. The data from the two ERCs were analysed separately. Patients from each Centre were divided into three distinct classes according to the outcome scores. Thus a qualitative classification of the outcome was derived from the scores. Details of the analytical methods, the variables used and the results are described elsewhere (Sheikh *et al.*, 1981).

The associations shown in the tables were tested for statistical significance by a chi-squared test without Yates' correction.

Table 1. Classification by impairment.

Impairment	Garston Manor n=1050 (per cent)	Perivale n=1063 (per cent)
Limb injuries	*13.3*	*9.0*
Backache	*13.7*	*12.9*
Neurological with motor deficit	*13.5*	*5.4*
Other neurological	*13.1*	*14.2*
Rheumatological (excluding backache)	*7.5*	*7.5*
Cardiovascular or respiratory	*12.1*	*14.1*
Other organic	*3.3*	*4.9*
Psychoneuroses	*9.7*	*10.6*
Psychoses or addictions	*11.7*	*19.9*
None	*2.1*	*1.5*

Results

The Figure and Table 1 show the age distribution and the classification by impairment. The rehabilitees were predominantly manual workers (79·5 per cent). The correlations between the independent variables and the outcome were consistent in the two populations. The results are, therefore, combined.

Out of the total of 1,928 rehabilitees whose outcome was known, 68 (3·5 per cent) were either under employment age or receiving higher education before starting ERC courses; they could not be considered as unemployed. Table 2 shows the relationship between the duration of unemployment before starting the courses and the outcome in the remaining 1,860 rehabilitees. Those who had been unemployed for longer tended to have a poorer outcome. The trend was reversed in those who had had shorter periods of unemployment ($p<0·001$). Duration of unemployment was not related to the level of physical disability, the length of disabling illness, educational levels or qualifications, but it was age-related and was highly correlated with motivation for work ($p<0·001$). It was significantly associated with outcome even after taking into account numerous intercorrelations between the independent variables and the effects of the association between outcome and other predictors (Sheikh *et al.*, 1981).

Out of the 1,928 rehabilitees, 1,831 (95 per cent) had been interviewed by occupational psychologists who assessed their motivation for work. Table 3 shows a close relationship between the level of motivation and outcome. Higher proportions of well-motivated rehabilitees than those reluctant to work had a good outcome. The influence of motivation on outcome was indepen-

Table 2. Relationship between length of unemployment before attending the course and employment outcome.

Time unemployed (months)	Number of rehabilitees	Outcome (per cent)		
		Good	Intermediate	Poor
0–3	350	*45.1*	*32.0*	*22.9*
4–6	385	*34.3*	*40.5*	*25.2*
7–12	445	*30.8*	*33.2*	*36.0*
13–24	372	*26.1*	*29.8*	*44.1*
>24	308	*15.9*	*34.7*	*49.4*

Table 3. Relationship between motivation and outcome.

Motivation	Number of rehabilitees	Outcome (per cent)		
		Good	Intermediate	Poor
Keen to work	1,023	*39.0*	*30.2*	*30.8*
Willing to work	730	*23.2*	*36.1*	*40.7*
Reluctant to work	78	*16.7*	*35.9*	*47.4*

dent of the effects of duration of unemployment or any other predictor (Sheikh *et al.*, 1981).

Discussion

From the point of view of medical rehabilitation, the crucial period is usually the early weeks of incapacity—before the patient has had time to relinquish hopes of recovery and becomes accustomed to the role of an invalid. Where there is delay in resuming normal activities, many patients adjust to being dependent, and change their attitude to everyday life; their motivation to reach maximum fitness and return to work then deteriorates. The length of time a patient is off work before medical rehabilitation is correlated with delay in return to work (Copp, 1966); the attitude of the patient and loss of self-confidence also affect the prognosis (Wing, 1966). An early return also depends on the confidence of the patient's employer. There is a tendency for some of the larger firms, particularly in heavy industries, to safeguard their interests and not to take patients back as quickly as they could. Muir (1977) believes that both patient and employer are and can be influenced by professional advice, largely from family doctors.

There is evidence that the duration of unemployment following disability depends, to some extent, on social welfare benefits (Nichols, 1975). However, delays in taking clinical decisions (Brewerton and Daniels, 1971) or inadequate treatment (Woodyard, 1980) also affect the patient's chance of re-employment, and doctors have been blamed for giving insufficient explanation, advice and encouragement about return to work (Nagle *et al.*, 1971; Barnes *et al.*, 1975). It is generally acknowledged that general practitioners and junior hospital doctors are often reluctant to take decisions about fitness for work following chronic illness or disability. To be on the safe side, they advise against an early return to work. For example, an average patient, three months after an uncomplicated myocardial infarction, has the capacity to do almost any job. Yet, 50 per cent return to work 6 to 12 months after infarction, another 25 per cent take longer and the remaining patients never go back to work at all—usually on the advice of their doctors (Muir, 1977). Similarly, in the case of those undergoing coronary artery surgery, the attitude of their doctors is considered to be the most important factor in their resettlement (Graham *et al.*, 1979).

There are obviously many factors responsible for this over-cautious attitude—lack of communication and liaison with professional colleagues and employment services, lack of co-operation from employers, insufficient time available for counselling and inability to assess a patient's aptitude and capability for work. How, then, can doctors influence their chronically disabled and unemployed patients? It is most important to reduce the period of incapacity and unemployment, and to restore the confidence and motivation of the patient. This may be achieved by anticipating work problems, close liaison with employers and by referring patients for medical and vocational rehabilitation at the earliest opportunity.

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Address for reprints

Dr K. Sheikh, Department of Epidemiology, University of Michigan School of Public Health, 109 Observatory Street, Ann Arbor, Michigan 48109, USA.