courses of treatment and prophylaxis should be avoided.³⁸ Equally important is the early detection of resistant organisms and the prevention of cross infection by them.

For the future, the strains of *H influenzae* and *N gonorrhoeae* resistant to their previous antibiotics of choice are unlikely to disappear: they are too well established and resistance has not altered pathogenicity. The sensitivity of *Str pneumoniae* and *N meningitidis* to penicillins may be at risk, and the incidence of group A streptococci M types resistant to erythromycin may increase under selective pressure from this drug. The genetic event that transfers resistance to a common pathogen seems to be rare, but once resistance has occurred it may spread fast and far. In the Philippines penicillin became obsolete for gonorrhoea within months, and multiply resistant *Staph aureus* has progressed world wide. Constant vigilance and careful prescribing are necessary even to maintain the status quo.

P J SANDERSON

Consultant Microbiologist,
Edgware General Hospital,
Middlesex HA8 0AD

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Work for the disabled

"Significant living without work" is an experience now beginning to extend to some medical graduates, and the signs are that they neither welcome it nor rate its value highly. A recent report by Newton and Robinson, commissioned by the Greater London Association for Disabled People, showed that in 1981 only 13% of disabled school leavers found permanent jobs in open industry; half the young disabled in the sample were unemployed.¹ The young disabled have considerably fewer resources and more problems than medical graduates—but their attitude to unemployment seems unlikely to be any more welcoming, even though their expectations have been shown to be extremely low.

One of the measures of successful recovery from an acute or less acute medical episode such as renal transplantation is return to work. Successful management of prolonged disease such as juvenile chronic arthritis is also quantified by the proportion of patients gainfully employed; one of the eventual end points of effective antenatal care must be the production of an adult functioning well in his or her community. So doctors as well as disabled young people and their families should be greatly disquieted by the high unemployment among disabled school leavers.

What are the causes? Plainly, the current prolonged economic downturn must influence figures—it makes nonsense of any attempt to run a resettlement clinic. For a political misfortune political remedies are required. We must, however, look at other factors associated perhaps with the patient's disabilities or with his interaction with the employment world. Within school disabled children are usually well cared for and to some extent protected. Here lies part of the problem. Disabled youngsters have experienced much loss of educational time by the normal school leaving age; they may be encumbered by physical, educational, social, and emotional immaturity. They need the time and the opportunity to develop within further education; local further education should be more available to them (available not only in terms of physical access but in a wide range of curriculum activities). They need to develop social skills and communication skills, and to become adjusted to disability. Hand and eye coordination may need to be improved (perhaps with arcade games?). If these objectives are to be achieved the individual's problems should be diagnosed before he or she leaves school and should be known to all the professionals concerned. The aims and goals of treatment in relation to employment may then be agreed in order of priority. Whenever possible the young person should learn to drive at the early age of 16 so that job hunting is not complicated by travel difficulties.

Some of the recommendations of the recent report *Beyond the School Gate* are not immediately relevant to medicine, but there are many aspects where doctors can promote good practice.² Seventeen per cent of young people at special schools had no social and educational contact with their peers outside their own school: ordinary schools gave considerably more attention to occupational assessment than did special schools. One third of the young people were unable to manage their own routine daily activities (such as dressing and hygiene), and only a very few were travelling to school independently; many emerged with few qualifications, though less than half had a learning disability. Many of these features are amenable to treatment, though the low level of expectation noted by Walker can be expected to

persist—until real changes occur.³ At present most young disabled people do not have careers—they have, perhaps, a series of dead end jobs without any structured progress, and they are often directed exclusively to manufacturing or assembly work.

In many ways the problems of these young people are similar to those of their adult counterparts. Extensive medical treatment and much highly competent surgery may influence their subsequent day to day existence little. A series of mishaps, of missed and delayed opportunities, may have tipped the scales against an individual. For example, a patient may remain at home for many weeks, vaguely "convalescent" but with no graded exercise regimen to help him gradually adjust to the level of physical demand his job will make. Frequently, too, the rehabilitation process is lengthy with gaps between medical and employment rehabilitation and later retraining.

Doctors should be alert to these hazards and should try to return a patient to his work rapidly, enlisting whatever help is required sooner rather than later. Some patients equate outpatient visits with "being under the doctor" and hence off work. They should be told explicitly the expected date they may return to work; they should be sent to occupational therapy for job evaluation and tuning up rather than to convalescence, and where necessary they should be directed to the disablement resettlement officer and the employment rehabilitation centre.

But the problem is wider than the individual and has rarely been subjected to the same sort of scrutiny given, for example, to a new disease. Intrinsic factors include the nature of the disability and its prognosis, whether static, fluctuant, or progressive (in either direction), and the functional limitations this diagnosis implies.

This information is rarely passed on appropriately to the other people concerned. For example, many old ideas on the nature of epilepsy are still widespread, with employers and work people often unduly frightened by it. Asthma also frightens; stroke is usually taken to imply gross intellectual deficits that may not be present. Employers expect disabled workers to be poor attenders and poor performers and to contribute to accident statistics. Clearly some severely handicapped individuals cannot perform at the rates normal in open industry. However, Kettle's work suggests that the received wisdom concerning disabled workers is often wrong: disabled workers have been shown to have better than average safety records and attendance.⁴ Doctors could help greatly in ensuring that employers are aware of these up to date findings and by drawing their attention to the excellent book *Employers' Guide to Disabilities*.⁵

Rarely is the work potential of a patient fully analysed—either for his present or for other occupations. Too often doctors themselves give irrelevant, even subjective information. Rarely does the patient have the benefit of systematic work evaluation. More usually assessments end with a suggestion that the patient is suitable, say, for light packing (there may be many hundreds of able bodied people seeking this) or sheltered work (of which little is available). I hope that the work of Bolton,⁶ of Banks and his colleagues⁷ and of others will be extended to the disabled and that experiments now being undertaken in various employment rehabilitation centres will show the merits of approaches that are flexible and may include work sampling.

The Employment Rehabilitation Research Centre's information paper No 10 defines the current problems and necessary changes clearly.⁸ It shows that more use should be made of techniques in other fields so that the assessment of

the needs and potential of a patient seeking work become more precise. Thus structured information on work skills and work adjustment, social skills, physical fitness, functional ability, and disability should be obtained and used to produce vocational objectives agreed with the client. Such an approach gives a profile of the patient (or client) that can be compared with the characteristics of the jobs sought. The various possibilities—training the person efficiently, altering the job, or using aids and adaptations in the working environment (available from Manpower Services Commission)—can then be explored more realistically.⁵

Such developments should be supported by doctors. In a desperate desire to help our patients find some work we may collude in the unrealistic practice of squeezing square pegs into round holes (leading to subsequent disillusionment of all concerned and to unemployment). Instead doctors should press for proper assessment to produce the ability profile of a potential employee. With this information perhaps we may hope for changes in attitude from employment agencies and employers. Possibly health authorities (who fail miserably in employing their quota of disabled people) will lead the field. Our aim must be that "significant living without employment" becomes as much a memory for disabled people as for their able bodied peers.

M ANNE CHAMBERLAIN

Consultant Physician in Rehabilitation
Medicine,
General Infirmary,
Leeds LS1 3EX

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Patient controlled analgesia

The only arbiter of pain is—or should be—the patient. In the treatment of prolonged pain drugs are adjusted periodically to match the patient's requirements, but this approach is usually abandoned for those in acute severe pain. The typical prescription is for morphine (or a similar drug) by intramuscular injection, four hourly as required ("prn")—but this often gives unsatisfactory results. After upper abdominal or thoracic surgery more than half of all patients complain of severe pain,¹ and fewer than half of all mothers in labour report satisfactory pain relief.²

We should not be surprised that a stereotyped prescription cannot cope with individual variations in the response to pain. Nevertheless, the reasons for adopting a cautious approach are understandable: doctors fear mortality from respiratory depression with bolder regimens using larger or regular doses or continuous infusion. Furthermore, clinicians lack confidence in the safety of limited respiratory depression after partial agonist or agonist-antagonist drugs. Most doctors and their patients would agree that a cautious