

in addition in two-thirds, and multiple pathology was not uncommon. The outlook for three-fifths was deterioration, though improvement could be expected in 8%.

It was considered that special treatment in the past, if available, would have been unlikely to have made much difference to more than half the respondents, but one-fifth could have benefitted from surgery. In contrast, present specialist needs were thought to be considerable, although the biggest call was for out-patient rather than in-patient treatment. The need for other remedial assistance and for aids, appliances, and adaptations was even more marked, and the resource implications of these assessments are challenging.

The biggest practical problems in life around the house were in cutting toenails, doing housework, having a bath or all over wash, getting out of the house, and coping with stairs, and for the three former of these at least a fifth of the respondents were dependent on other people. In sampling the respondents' attitudes, it was striking that although 70% claimed that nothing had been done to help them, the majority had not asked their family doctor for help, even though more than half considered that something could have been done.

**Psychological and Social Impact of Progressive Neurological Disease with special reference to the Domileitary Medical, Nursing, and Social Services.**  
BARBARA C. STEVENS (*General Practice Research Unit, Institute of Psychiatry, London*)

This survey examines the psychological and social effects of severe physical disability, taking into consideration the medical prognosis, the social role expectations of the patient, the personality of the patient, and the burden of care experienced by his relatives. There were 650 patients who were registered as being disabled as a result of a neurological condition in a London Borough; 174 were suffering from progressive diseases such as multiple sclerosis, myasthenia gravis or dermatomyositis, 44 more were paraplegic or quadriplegic, 274 hemiplegic, 55 had had polio, and 102 cerebral palsy or other paralysing conditions. Fifty-six patients have been given the following assessment battery: an interview to assess social problems, Nichol's evaluation of general and motor impairment, the Katz Index of Dependence in Activities of Daily Living, and Goldberg's 30-item General Health Questionnaire to detect anxiety and depression.

Results based on patients with multiple sclerosis and muscular dystrophy suggest that although the physical needs of these patients are generally met by the present medical, nursing, and social services, their psychological needs are not. In a sample of the severely disabled approximately one-third were chronically depressed or anxious.

**Factor VIII Replacement in the Treatment of Haemophilia A—A Simple Illustration of a Need-Supply-Demand Spiral.** MARY SPENCELY and J. D. CASH (*Department of Social Medicine, University of Edinburgh*)

The treatment of haemophiliacs is used as an example of the general principle that changes in supply can lead to changes in the attitudes of those prescribing and those receiving. This in turn leads to demands for further supplies.

In haemophilia A there is a deficiency of factor VIII which can be obtained from whole blood. Newer methods of production have permitted changes in treatment patterns with more outpatient therapy. Clinicians can now encourage earlier reporting of bleeds and can offer, on an experimental basis, prophylactic treatment.

The provision of factor VIII, expressed as pints of whole blood processed, in the South East Region of Scotland has risen from the pre-1964 plateau of 1½–2 thousand, through a second plateau of 2½–3 thousand, and since 1970 there have been dramatic annual increases to an estimated 12,000 for 1973.

Analysis of two years' experience of the treatment of haemophiliacs in the region has been carried out. In terms of numbers treated, 26 of 41 severe haemophiliacs were treated in 1970, 29 in 1971. They reported 143 and 164 episodes respectively. Though there has been no change in the average number of episodes per case, the distribution has changed. Two individuals contributed 40% of the total episodes in 1970 and only 32% in 1971 after they had been placed on prophylaxis. Of the remainder, in 1970 only four reported more than six episodes and one of these died. In 1971 there were six. There were 145 treatments in 1970, 207 in 1971. This increase was for outpatient treatments, i.e., for milder or 'earlier' bleeds. The average donation equivalents per episode rose from 17 to 22.

Thus, increased availability of factor VIII has permitted earlier treatment by clinicians and more reporting of episodes by the haemophiliacs themselves. The next step in the spiral is widespread prophylaxis. The limiting factor must be, as it generally is, limitation of supplies.

**Rheumatoid Factor, So-called—What does it portend for the Population?** ELIZABETH M. BADLEY, JOHN BALL, and PHILIP H. N. WOOD (*ARC Epidemiology Research Unit, Manchester*)

Rheumatoid factor (RF) is an anti-antibody found in the serum and was first noted in patients suffering from rheumatoid arthritis (RA), where its presence is of some significance clinically, tending to be associated with more severe disease and a less favourable prognosis. However, the biological importance of this phenomenon in the population is uncertain, although links with lung diseases and ischaemic heart disease (IHD) have been postulated, as has RF as a risk-factor for RA. A collaboration with the MRC Epidemiology Unit, Cardiff, provided an ideal opportunity to study the broader significance, and so RF was measured by the sensitised sheep-cell agglutination test (SCAT) in surveys of a Rhondda Fach population sample carried out on two occasions 10 years apart.

Serum is titrated in doubling dilution, one-quarter, one-eighth, one-sixteenth, etc., with a preparation of sensitised sheep cells, and the results are usually expressed as reciprocal titres or by tube numbers. Analysis is not