Aspects of Student Health

Problems of disabled students

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Continued improvement in accident surgery, antibiotic treatment, antenatal care, and medical surveillance has increased the life expectancy of so many young people in the past two or three decades that ever more are reaching the age of access to tertiary education with the handicap of a physical or congenital disability that formerly denied them survival. The educational facilities of special schools, long-stay hospitals, and home tutoring have also improved progressively in recent years, and the disabled individual who is intellectually endowed may now achieve comparative—if not distinctive—academic success. Thus the “wheel-chair” student, the blind undergraduate, or the paraplegic tutor has become a noticeable feature of the contemporary campus.

Evidently, however, many physically disabled people intellectually capable of benefiting from tertiary education are not being accepted by colleges or universities, despite ever increasing and welcome efforts by many pioneers. It has been variously estimated that, while the incidence of physical disability in the population is about nine per 1000,¹ less than two per 1000 are found in university communities as students or staff,² and of some 7000 school leavers finishing their education in special schools for the physically handicapped less than 40% entered further education when more than 80% were deemed by their teachers intellectually fit to do so.³ While nationally a considerable increase in the absolute number of disabled students at universities and colleges has occurred in recent years, this minority group is characterised by underachievement in the postsecondary sector of education—and the reasons are not hard to find on close inquiry.

Which university to enter

The initial hurdle for the potential university entrant who is physically disabled is that of coping with the entry requirements. Prospectuses rarely emphasise facilities for those with health problems, and only three universities⁴ publish, as yet, policy statements about accepting students with a physical handicap—although pressure to alter this is currently being exerted through a newly established liaison body—the National Bureau for Handicapped Students.* Conformity with the required academic standards may be detailed on the Universities' Central Council on Admissions application form, but only recently has information about health problems been sought on this form, and, normally, background information about the candidate would be given by the pupil's headmaster.

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An interview may be offered to all or most students, but for the physically disabled it is necessary for this to become obligatory to initiate close liaison with the university's medical service and to enable the candidate to reconnoitre the campus facilities. The predicament otherwise arises when the physically disabled student must either find a university or college that has accepted his or her kind of disability before (difficult without recognised sources of information), choose a site that is suitable (which may be impossible without visiting) as well as a course (and prejudice may deny acceptance), or else summon a powerful determination to convince the unconverted that they deserve at least an opportunity to try—and yet meet, sometimes, disappointment. On this latter point some universities will reject applications for entry “on health grounds”; some courses are considered unsuitable for specific handicaps (such as medicine for the blind); and most Colleges of Education for teachers will, on Department of Education and Science recommendations, stipulate physical fitness for entry to the profession as a “sine qua non.”

Moreover, the personal difficulties of managing the handicap may deter many from the thoughts of leaving home, particularly if environmental adaptation is essential for their well-being. Parental disinclination to part with physically dependent sons or daughters is strongly felt by many, and may add to the disincentive, while accommodation problems, the needs of a full-time attendant, or financial deprivation may all prejudice the opportunities of the disabled patient to lead a student's life. It is obviously some, or a combination, of all these reasons that prevent many of the physically handicapped from entering tertiary education. Nevertheless, it is possibly also because of these circumstances that the Open University has been able to make such an impact in education for the disabled who stay at home. Their enrolment of some 10 to 20 times the number of such students, by comparison with any other institute of higher education, is a noteworthy development in recent years in the intellectual advancement of this group, and must be recognised as a major contribution to the well-being of the disabled.

Despite the difficulties, however, over 250² full-time students are at present studying in British universities having overcome

TABLE 1—No of physically disabled full-time students at British universities 1975-6²

Categories	No of students
Blind (complete and partial)	50
Deaf (complete and partial)	33
Speech impaired (severe)	24
Spastic	36
Paralysed	21
Wheelchair	26
Walking aids	30
Others (neurological impairment of walking, spinal cord cyst, haemophilia (3), colostomy, chronic renal failure (2), cerebral tumour (3), spina bifida (2), muscular dystrophy (4), congenital absence of leg, congenital absence of arms, congenital absence of bladder, cystic fibrosis, cardiac lesions (4), and terminal Hodgkin's disease)	38
Total	258

the problems, both personal and institutional, of acceptance. The range of disability is considerable, from cystic fibrosis to thalidomide deformation, from tetraplegia to renal failure needing dialysis, and from blindness to muscular dystrophy (table I), and the most remarkable feature is the rarity of academic failure. Over a period of five years 14 (table II) failed to complete their course, and only three for academic reasons. Sadly, the main reason for failure to complete was death or progressive impairment due to advancement of the illness—for instance, multiple sclerosis, renal failure, psychiatric handicap—that was otherwise unpreventable.²

TABLE II—Reasons for failure to complete academic course

Progressive multiple sclerosis and death
Blind, with psychiatric handicap (3)
Renal failure—withdrew
Cystic fibrosis—withdrew
Paraplegic with intractable pressure sores
Death (3)
Academic failure (2)
Withdrew to marry
"Chose the wrong course"

Care at the university

No doubt because of the challenge presented to the university medical services by the need to care for such students hitherto uncalled-for expertise has been developed. Campus medical centres have acquired much specialised equipment, arranged new liaisons with physiotherapy and community nursing services, obtained loans of such as ripple-beds, hoists and possum typewriters, the use of "tail-hoist" transport, the services of voluntary readers, and have become closely concerned with all aspects of physical and rehabilitative medicine. One university even provides two-way radios for the personal use of its wheelchair students while another has a specially built four-bed residential unit for the disabled provided by a benefactor's endowment. Most, however, would seek to integrate the disabled into the community by modifying ground-floor rooms in halls of residence and providing all the services needed on a domiciliary basis so that as "normal" a student lives as possible can be achieved.

Reading University's experience has been long as it is fortunate in having a geographically flat campus, with the halls of residence on the periphery of the site, and a purpose-built health centre; the academic record of the disabled students accepted in the past has proved a constant incentive to acceptance. The policy is that no student is rejected for entry on grounds of health, and acceptance is based solely on academic merit. The difficulties of obtaining adequate foreknowledge about a handicapped student's personal needs have been over-

come by interviews at the university health centre after the academic one—which, on occasions, has included an overnight stay to ensure appropriate assessment (for sometimes over-optimism about independence can be a contrast to the more common pessimism)—and the establishment of correspondence with the applicant's general practitioner and consultant advisers as long in advance of arrival as possible. A disabled register is kept and circulated to the appropriate tutors, wardens, and careers advisory services at the beginning of each academic year to ensure that all the student's needs are cared for, and in the vacation correspondence with the general practitioner at home about any changes in the disability ensures continuity of care. This year, for example, 23 new physically disabled students (nine in wheelchairs, two blind) have started their studies and will continue to enjoy their independence and their right to personal dignity achieved through the benefits of tertiary education.

The future

The future for the disabled student is improving continually. Financially, the extra allowances for attendants, non-contributory invalidity pension, and mobility allowance are all assisting the handicapped to independence, while access to public and university buildings is slowly being modified to meet the needs of the disabled. Educationally, the effect of integration on a campus means not only that the handicapped student is learning to cope with the vicissitudes of community services, supported by the efforts of specialised teams such as university health services—thus in an ideal "half-way house" for a period of their lives between home and outside, and being prepared for ultimate independent life and a career—but also that an educational effect is being achieved on the physically able. Graduates become managers, executives, and people who influence community attitudes in later life, and their own experience of the acceptability of the physically disabled in the university community may be expected to lead them to more progressive views about employing such people in the organisations they subsequently manage. Thus, the educational impact of the disabled student has been, is, and will be ever-widening in its influence.

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Why does herpes zoster infect mainly people over 50?

After an attack of chickenpox (varicella), the virus persists in a latent state in the dorsal root ganglia for a prolonged period, during which time its replication is restricted. Nevertheless, an appropriate stimulus may result in a change in the host-virus relation, with shingles developing as a result of virus replication, and spread along the peripheral nerve fibres. Until the precise mechanism by which varicella zoster (VZ) becomes integrated with the neuronal cell is known, we will not understand the exact mechanism by which virus reactivation occurs. Shingles is uncommon in children; in adults under 50 the incidence is about 2.5/1000 people a year. After 50 it increases progressively to about 5/1000 people between 50 and 60 and double this rate among octogenarians.¹ The increased frequency of shingles in the elderly may be related to the decline of varicella antibodies to negligible levels, which occurs over an extended period of time.² With shingles, ectopic lesions may occasionally occur, even in the immunologically intact person. This is more common in elderly patients and probably results from the low or absent VZ

serum antibodies. A primary infection with VZ virus may be associated with an incomplete IgG response that results in virus persistence, but after recurrent VZ infection (shingles) the immune IgG response is completed.³ Defective cell-mediated immune responses, however, are probably more closely related to the development of shingles, since reactivation of endogenous viruses belonging to the herpes group is common in patients whose cell-mediated immune responses are suppressed—for instance, patients with Hodgkin's disease and patients on immunosuppressive treatment after organ transplants. During aging, apparently healthy elderly people appear to have a lower proportion of circulating T cells (lymphocytes mainly responsible for cell-mediated immunity) than younger persons.⁴ Thus the declining proportion of immunocompetent T cells may also contribute to the increased frequency of VZ infections in older people.

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