

# University education for the physically disabled

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**SUMMARY.** Two per thousand of the student population are physically handicapped. The facilities for the care of physically disabled students were surveyed at the 34 universities that have full-time medical officers and primary medical teams. It was found that communication before arrival about special medical and nursing needs of the student is insufficient, that there is inadequate liaison within the universities between the admissions office and the medical unit, and a lack of published statements by the universities about the admission of the physically disabled.

In contrast, the facilities available for the handicapped student are considerable, the academic success rate high, the range of serious disability being successfully coped with is extensive, and there is a need for more encouragement in the community for the physically disabled to undertake, where intellectually capable, a university education.

### Introduction

**T**HE intellectually able minority who are physically handicapped face, if denied the opportunity of further education or development of skills, a life of dependence and frustration. If granted the opportunity, they may find the only pathway to becoming a contributor to society is through the enhanced or professional skills that can be acquired as a result of a university degree, and this way also leads to the possibility of achieving financial independence, social adjustment, and a dignity of spirit that is the right of every human being.

In the past many have been denied that right because of prejudice or lack of encouragement. At present,

however, there are many 'pathfinders' who, despite severe physical disability, are pursuing a university career, and one can predict that in the future an ever increasing number of individuals will follow in their halting steps. A survey therefore of the present opportunities for the physically disabled to obtain a university education, and an assessment of the difficulties and problems that exist, is appropriate to encourage others.

### History

Research in this field is comparatively recent. The National Innovations Centre studied the academic arrangements for disabled students in universities and polytechnics in 1973/1974. The same year the North-East London Polytechnic, in association with the Central Council for the Disabled, sponsored a national conference on the disabled student in higher education (1973), and recently the National Union of Students sponsored a survey of admission policies (Child, 1975/1976). The Vernon Report (Department of Education and Science, 1972) on the education of the visually handicapped concentrated on the needs of the school-child, and only briefly considered further education for this one area of disability. Thus, the current study was undertaken to define the number of student patients involved, the range of handicap, and the difficulties met by the disabled in obtaining a university education.

### Definitions

The physically disabled student may be defined as one who suffers "physical or sensory impairment or chronic sickness which could provide educational disadvantages". This in turn may be elaborated as blind or partially sighted, a hearing impairment, serious speech defect, paralysed limbs or defective control over limbs or bodily functions through congenital or acquired disorder or disease, and requiring continual attention, treatment or care (Central Council for the Disabled, 1973).

Using a definition akin to this, the National Innovations Centre identified in its survey an incidence of two disabled students per thousand at university, com-

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Précis of an Upjohn Travelling Fellowship Report 1975.

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pared with the estimated nine physically handicapped persons per thousand in the population as a whole (Harris *et al.*, 1971).

**Perspective**

There are about two per thousand physically disabled students in universities in the UK (1975/1976) with a wide range of disability varying from the congenital to the recently acquired (Tables 1 and 2).

The first hurdle that any student may meet in seeking further education is that of acceptance for university entry, and this barrier is, ironically, often higher for the disabled. Having the required pre-entry qualifications does not necessarily mean they will obtain acceptance or, indeed, discrimination in their favour. The problem thus facing potential physically disabled students is one of either finding a university that has accepted his or her kind of disability before, which is also suitably situated and runs the relevant course, or

else summoning a powerful determination to convince the unconverted that they deserve an opportunity at least to try.

Recent pressure by the National Bureau for Handicapped Students is, however, leading to a clarification of admission policies by universities and colleges, and some of these hurdles may thus be reduced for the disabled patient. There is one other alternative—the Open University. Since its foundation in 1970, its policy has been both positive and enthusiastic regarding enrolment for the physically disabled. The establishment of a full-time senior counsellor, and a committee devoted solely to co-ordination of the needs of the physically disabled, has, from the beginning, produced the most remarkable inroads into the problem of further education for the disabled. More than 400 students are currently taking degrees in this way, a number at least ten times that of any other institution of further learning. It is obvious that for the disabled learning at home is the easiest way, but the Open University insists that, where possible, all students leave home at least annually for two or four weeks, to attend the summer courses held at various universities throughout the UK. This in itself is beneficial for both the individual and the institution that acts as host, in coping with the difficulties that arise.

There is, however, one comment that is inescapable, notwithstanding every admiration for the work of the Open University, that by achieving an independence from the home environment for a few weeks a year, whilst it may start a change in attitudes, does not serve necessarily to complete the metamorphosis from being homebound that a three-year residential course would otherwise do. However, the Open University disabled students, by attending a course each summer, influence every institution they attend, and prejudicial attitudes in acceptance of other full-time students are thus being constantly eroded.

Similarly, it must be accepted that a degree course for the disabled offers not only intellectual training, but proof of the ability to achieve independence and thereby, hopefully, integration within the community. To provide these three advantages to all is a challenge that stretches every facility of the educational institute to the utmost. From this survey it would seem that while some fail to meet this challenge many compromise and quite a few are successful.

**The numbers**

The number of physically disabled students enrolled in the 1974/1975 session for three years of university study is a minority both in the population at large and in the university community. The problem of statistical accuracy in assessing the incidence is bedevilled by the failure, as yet, of any special record of this group being kept by the majority of university medical services. Twenty-three university health services do not have any form of register or morbidity index and admit that the

**Table 1.** Number of physically disabled full-time students at 34 universities in the UK.

<i>Numbers involved</i>			
Blind	complete	31	50
	partial	19	
Deaf	complete	6	33
	partial	27	
Speech impaired (severe)			24
Spastic			36
Paralysed			21
Wheelchair			26
Walking aids			30
Others			38
Total			258

**Table 2.** Further categories of handicap (described as "others" in Table 1).

Neurological impairment of walking (6)
Spinal cord cyst
Haemophilia (3)
Colostomy (4)
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 (4)
Cardiac lesions (4)
Terminal Hodgkin's disease (2)

**Table 3.** Reasons given for failure to complete academic course.

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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”

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records they do have are estimates of the numbers involved. Nevertheless, the numbers in the categories asked for by the investigator represent a total of 258 in a student population of 132,264 (Table 1).

In the category not defined, the range of illness or handicap is detailed (Table 2) and, interestingly, the number of students who, despite this range of disability, have failed to complete their academic course is small (Table 3), only 14 have been recorded in the last five years, three of whom withdrew for academic reasons, while four died before the completion of their course.

The conclusion that an extraordinary range of disability is being coped with is inescapable. Credit must be given for the way in which physical handicap is being overcome by means of adaptation, not only of buildings and facilities, but also by means of the special dispensations that are currently being made by universities in order to enable disabled individuals to undertake the examination process.

### Difficulties in undertaking a university education

#### 1. University entry procedure

In the majority of cases, a potential university entrant completes an application form for UCCA (Universities Central Council on Admissions), and in recent years this form has asked for information about health that may be relevant to the student's proposed academic career. Headmasters complete the form for submission giving relevant information and, after processing, it is forwarded to the university likely to accept the candidate for the course chosen. At this stage university admissions officers have sight of all this information, and it is crucial as to whether the staff seek the opinion of their own institution's medical advisers about any history of physical handicap given. Some universities (nine), however, do not do this, although two of them do “sometimes” and one only “rarely”, and an acceptance (unconditionally, or dependant on subsequent ‘A’ level results) or a refusal, may then be indicated to the student.

A further crucial stage is then reached where each acceptance or offer of a place is accompanied, in some

instances, by a request for routine medical information in confidence for the university's medical services from the candidate's family doctor. It is at this stage that the process of coping with the admission of a disabled student begins and this may be the weakest link in the chain of events for a variety of reasons.

#### 2. Problems with pre-entry information

It would be ideal if each potential new entrant with a physical handicap was interviewed or examined by the medical adviser to the university, to identify needs. Again, however, it is found that only half of the universities involved do this, although it is admitted by some that it can depend on the relevance of the handicap to the course applied for. Similarly, there is an alarming gap in communication emphasized by eleven university physicians who state categorically that they fail to receive sufficient information about needs before the arrival of the student. One indicates that the medical records arrive with the student, another that students may conceal information for fear of refusal of admission (a clear indication for the need of a universal declaration of intent about admission policies), another that the reply may not be forthcoming from the family doctor because the doctor's name is not declared on the application form. Of those who do obtain enough information most do so only by prolonged correspondence with headmaster, family doctor and potential student, and the need for a model policy to be followed in all cases is obvious.

From the student's point of view, pre-entry, or even pre-application information about the campus of choice, is obtainable only from the institute's prospectus, and this may not devote any space to the needs of the physically handicapped. Only two universities at present (1975) publish a statement of intent to encourage the physically disabled. For this reason the most welcome addition to the literature available in recent years has been the publication of *Access to University and Polytechnic Buildings* (Central Council for the Disabled, 1972), which to a considerable extent identifies the geographical difficulties a student may meet at each institution. Again, it cannot supplant the need for the potential entrant to visit the site that may be chosen.

#### 3. The facilities available

Once a patient has surmounted all the obstacles of selection, academic acceptance, and preparation for entry by the transmission of all the appropriate information, and completed liaison with the medical facilities provided by the institution, a surprising number of special adaptations of the environment at universities throughout the UK await his or her arrival. Most universities are old buildings; only a few, for example the University of Stirling, are modern enough to have been designed with the needs of the physically disabled in mind, and many, although of recent construction, are

on hilly sites. Nevertheless, the majority have overcome many of the hazards for the disabled visitor or resident.

Only seven have no adaptations to the environment for the physically disabled; the other 27 offer a varying number of special facilities from ground-floor rooms in halls of residence, to special car-parking facilities and ramps to provide access to lecture theatres. Only six have specially adapted rooms in the health centres, and one has a four-room centre which was specially built as a physically disabled students' residence. One university has lecture theatres equipped for use by the deaf (plug-in listening aids), another has had part of the library adapted for use by the blind, and three have provided specially constructed toilet facilities for the disabled. The general picture—despite one university that has no lifts in any of its teaching buildings—is one of a relatively hospitable environment for the needs of the disabled, which is constantly improving, even for the immobile (Figures 1 to 3).

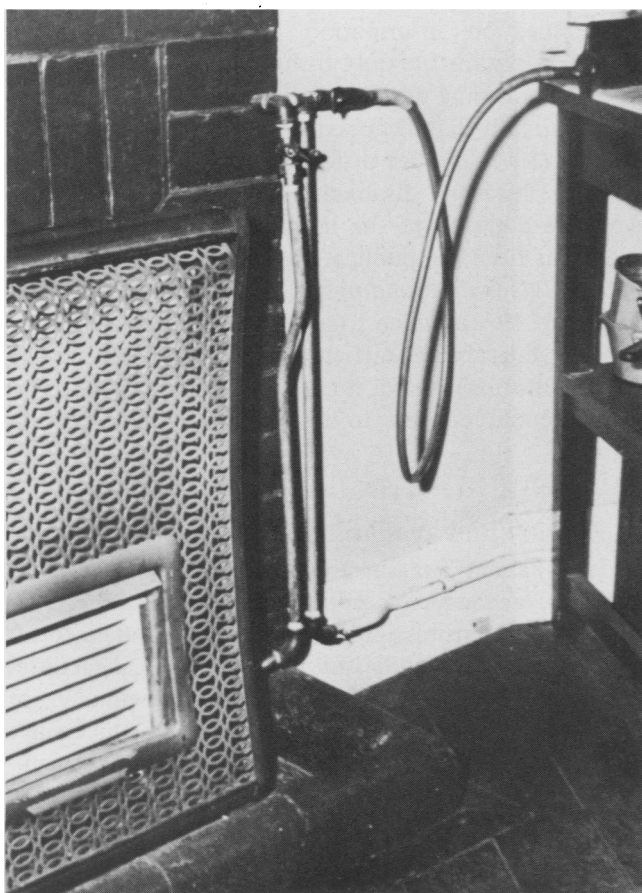
Similarly, within the medical services provided by the 34 universities that have full-time medical staff and facilities, there is a rich supply of aids and equipment. At least half have their own equipment at the disposal

of physically handicapped students. Three have 'ripple beds' for loan, six have access to electric typewriters and even 'possum' equipment, eight provide tape-recorders, twelve have wheelchairs for students' use, and others mention the availability of hoists for bed/bath, 'light writers', electric calculators, alarms for installation in the disabled student's bedroom, walking aids, and internal telephone extensions. One university even has access to two-way radio transmitters for portable use.

The other 18 universities may lack their own equipment, but indicate that any disabled student may bring or have access to, any equipment needed (Figure 3), and here the value of constant liaison with the Disabled Living Foundation needs to be emphasized. Their collection of aids for the disabled is probably unique of its kind in the world, and the centre takes the form of a comprehensive standing exhibition where aids of all kinds can be seen, examined, and demonstrated. Catalogues and leaflets are available, and for any doctor, paramedical worker, welfare or individual involved in the care of the disabled, a visit to this centre is essential.

Apart from aids, the need for nursing care, however,

**Figure 1.** Gas fire tap modification to enable wheelchair-bound student to control study-bedroom heating.



**Figure 2.** Carpet removed from study-bedroom, extra wall socket provided to enable electric wheelchair to be charged. (Student's hi-fi equipment has been specially adapted.)



does demonstrate that inadequacy exists in this perhaps potentially most expensive form of provision. Only two universities take on extra nursing staff to help the physically handicapped staying on the campus. Ten other institutes make use of the district/domiciliary nursing services, and only four have students in residence with full-time attendants. It is obvious that at this level of need the physically disabled do not receive the benefits that they might require, and without them obviously acceptance will be prejudiced, opportunities restricted and, indeed, entry to the university becomes, for most, impossible. There is an eternal triangle of circumstances; if the facilities are not provided the individual cannot perhaps contemplate removal from the home environment, thus the numbers are restricted, and each potential applicant will find greater difficulty in acceptance. Ironically, the use of the domiciliary nursing services throughout the UK should deny no-one the possibility of support, and it would seem that exploration of this national service is necessary. Those who do make use of it offer to the student especially important advantages by demonstrating that parental support can be cut, that survival outside the home is possible, and that the occasional delays, problems and

difficulties that inevitably arise are all part of life's future pattern essential to achieving independence. These are important aspects of education in life for the physically disabled that are sometimes ignored or avoided.

There is only one purpose-built hall of residence in the UK, at Falmer Park, Brighton, University of Sussex, and the development of more may be seen as either beneficial, or disadvantageous. Certainly, whilst offering all facilities they may encourage the totally disabled to leave the home environment, but they do not necessarily provide the integration in the normal community that other policies produce. This criterion of mine seems to me to be of paramount importance and the provision of a series of miniature halls of residence that resemble Stoke Mandeville Hospital or a Cheshire home, throughout the UK universities, does not, in my view, answer the problem of the disabled student's further education.

#### 4. Examination procedures

Once responsibility is accepted, by an institution, for an enrolled student, generally no effort is spared to assist him or her to take academic examinations. Only two universities in the survey make no special provision for the physically disabled at examination time. The others all offer arrangements tailored to the need of the individual. Secretarial assistance to dictate examination answers is provided by 21, extra time to complete the question papers by 25, and 30 offer secluded facilities for the sitting of the papers. Among the special facilities are electric typewriters, tapes, braille writers, calculators and, apart from routine medical supervision in all institutes, at least one offers the opportunity of an oral examination instead of a written one for the spastic.

Thus achievement of entry, ability to cope with disability and intellectual capacity to learn will not, in the end, be defeated by the demands of an examination system. It would justifiably seem, therefore, that this final *rite de passage* will be smoothed for all.

#### Conclusion

The physically disabled student's opportunity for a university education is not equal throughout the universities in the UK.

There are serious gaps in communication between university physician, admissions department, potential student, and family doctor, and thus information received before arrival by the doctor who will care for the disabled during their education is lacking. The design of special pre-entry forms for the physically disabled needs consideration, and a code of practice needs to be adopted universally to ensure the smooth transition of the disabled from home to university. Declarations of intent are needed to encourage more applications. Furthermore, more information of the facilities

**Figure 3.** Hospital bed provided instead of divan. Equipment to extend reach is available from the Disabled Living Foundation (being used here to retrieve fallen pipe).



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that do exist is required in order to give greater confidence to those who are physically disabled, yet intellectually able, in their choice of institute.

Family doctors, parents of the young disabled, and the public need to know more about what is already being done in order to provide encouragement and in order to emphasize the value of intellectual rehabilitation through higher education.

Finally, courage, imagination, flexibility and enthusiasm are called for, in order to offer places to and undertake to provide the care and the higher education of the physically disabled. Through this only will be the reward of overcoming the defects of a body and the granting of freedom to the mind, intellect, and spirit.

For my part, I believe that if disabled students are to achieve their true academic potential, they need a measure of positive discrimination in their favour. Equality of opportunity is not enough for young men and women whose handicaps demand much more than equality of effort if they are to compete on level terms with non-handicapped people of the same academic ability (Central Council for the Disabled and North-East London Polytechnic, 1973).

### References

- Central Council for the Disabled (1972). *Access to University and Polytechnic Buildings. A Handbook for Disabled Students*. London: CCD. (In process of updating and revision.)
- Central Council for the Disabled & North-East London Polytechnic (1973). *The Disabled Student in Higher Education*. London: Nelpress.
- Child, D. (1975/1976). *National Union of Students Survey of Disability Admission Procedures*. London: NUS Publications.
- Department of Education and Science (1972). *Education of the Visually Handicapped*. London: HMSO.
- Harris, A. I., Cox, E. & Smith, C. R. W. (1971). *The Handicapped and the Impaired in Great Britain*. London: HMSO.
- National Innovations Centre (1974). *Disabled Students in Higher Education*. London: HMSO.

### Addendum

Those seeking further information should contact: The National Bureau for Handicapped Students, Calcutta House Precinct, Old Castle Street, London E1 7NT, or The Disabled Living Foundation, 346 Kensington High Street, London W14.

### Jolly fat: relation between obesity and psychoneurosis in general population

The relation between fatness and aspects of psychological status was investigated in a representative sample (339 men and 400 women) of a middle-aged suburban population. A significant positive relation was found between substantial obesity and low levels of anxiety (in men and women) and depression (in men).

### Reference

- Crisp, A. H. & McGuiness, B. (1976). *British Medical Journal*, 1,7-9.