Visual impairment in Northern Ireland

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SUMMARY

Statistics on the registration of blind and partially-sighted patients in Northern Ireland underestimate the true extent of visual impairment within our community. In comparison to other UK regions, where between 0.53% and 0.59% of the population avail of blind or partial sight registration, only 0.35% of residents in Northern Ireland appear on the respective registers. Most patients on the combined registers are in the older age groups and many also suffer from other disabilities.

Regional discrepancies may be attributed to a combination of factors including: patient attitudes to the registration process, medical attitudes to registration and local anomalies in the way in which social services departments both record and present annual registration returns. Better liaison is necessary between the community, hospital and voluntary sector providers to improve identification and support services for the visually impaired in the future.

INTRODUCTION

The World Health Organisation (WHO) has estimated there are 38 million people who are blind, worldwide. A further 110 million people have low vision and are at risk of becoming blind, representing a global burden of visual impairment of 148 million people. Approximately 80% of visual disability occurs in the developing world.¹

There is no standard worldwide definition of blindness or low vision. The WHO data is based on the definitions in the International Classification of Disease (ICD 10) which defines ‘blindness’ as a best-corrected visual acuity of less than 3/60, or where the central visual field is less than 10 degrees around fixation, in the better eye. ‘Low vision’ corresponds to a corrected visual acuity of between 6/18 and 3/60 in the better eye.

In the United Kingdom a patient is certified as blind or partially sighted by a consultant ophthalmologist at the request of the patient’s local social services department. Registration, which is entirely voluntary, is subsequently carried out by the local authority.

Currently in the United Kingdom the legal definition of blindness, “so blind as to be unable to perform any work for which eyesight is essential”, is as stated in the 1920 Blind Persons Act.² There is no legal definition for ‘partial-sight’, although this term was introduced into the 1948 National Assistance Act, and has subsequently been interpreted as “substantially and permanently handicapped by defective vision caused by congenital defect, illness or injury”.³

These definitions are quoted on the forms currently used for registration in Northern Ireland (A655) and Scotland (BP1), but are so vague as to be unhelpful in defining the degree of visual handicap. In England and Wales the BD8 form which is used for registration specifies exact guidelines for the level of visual acuity and field loss required to facilitate inclusion.

There is therefore no uniform level of visual acuity or visual field loss in use to define ‘blindness’ or ‘partial-sight’ across the United Kingdom regions. This causes confusion when trying to correlate data from different areas.

METHODS

Blind and partial sight registration statistics, for the period 1980-1996, were collected and compared for England, Wales, Scotland and Northern Ireland. These statistics are compared with those for the United Kingdom regions. Statistics for the United Kingdom regions are obtained from the British Blind Society (BBS) and data collated from the Department of Health in Northern Ireland and the Department of Health for Scotland. Although these statistics are incomplete, they approximate the actual number of people who are registered blind or partially sighted in Northern Ireland.

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Northern Ireland. Data collection methods vary within the United Kingdom regions with the result that there are variations in the collection periods quoted.

New additions to the blind and partial sight registers in Northern Ireland, recorded between 1984 and 1996, were analysed in detail to establish the causes of visual handicap within our community and to identify the patients most at risk of developing visual impairment.

RESULTS

In each geographical area the number of individuals on the combined blind and partially sighted registers increased steadily during the period examined (Figs. 1a and 1b). In Northern Ireland the upward trend was least obvious. The averaged annual percentage increases in registration, recorded over the respective 8 to 14 year periods were: Scotland 7.2%, England 3.9%, Wales 3.3% and Northern Ireland 2.9%.

The numbers registered in England, Wales and Scotland, expressed as a percentage of the total populations of these areas, were 0.54%, 0.59% and 0.53% respectively. In Northern Ireland only 0.35% of the population appear on blind and partially sighted registration lists (Table).

In Northern Ireland, the number of new patients registered as having a visual handicap increased from 361 in 1984 to 731 in 1996 (Fig. 2). There has been a predominance of females compared to males, registered each year (1.6 to 1.0). The skewed distribution mimics the male/female ageing characteristics of the general population.

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**Table**

| UK Region          | Total number of patients on blind and partial-sight registers | % of regional population |
|--------------------|---------------------------------------------------------------|--------------------------|
| Wales (1993)       | 17,280                                                        | 0.59                     |
| England (1994)     | 265,400                                                       | 0.54                     |
| Scotland (1994)    | 27,215                                                        | 0.53                     |
| Northern Ireland (1994/95) | 5,764                                                        | 0.35                     |

Fig 1a. Total number of patients on the blind and partial-sight registers in Wales, Scotland and N.Ireland.

Fig 1b. Total number of patients on the blind and partial-sight registers in England.

Fig 2. New additions to blind and partial-sight registers in N. Ireland.
DISCUSSION

The main causes of blindness worldwide are cataract, trachoma, onchocerciasis and xerophthalmia. These conditions, which are prevalent in the developing world, can, to a large extent, be prevented or cured. Age-related macular degeneration and diabetic retinopathy are also common causes of visual disability but their global prevalence is uncertain. These are the predominant causes of visual handicap in developed countries. Diabetic retinopathy is generally recognised as a leading cause of blindness among those of working age while age-related macular degeneration is a problem which predominantly affects the elderly. Glaucoma and ocular injuries are also common causes of visual handicap in both the developed and developing worlds.

In Northern Ireland age-related macular degeneration, for which there is no definitive treatment, is by far the commonest cause of registration and has increased steadily over the last 12 years. The number of registrations due to diabetic retinopathy has also increased significantly despite screening programmes and the availability of laser treatment. Registrations resulting from chronic open angle glaucoma and myopia have tended to remain constant during the same period. The advent of local anaesthesia for cataract surgery and the implantation of intraocular lenses have virtually abolished senile cataract as a cause of registrable visual handicap in Northern Ireland.

There is universal agreement among authorities in the field of ophthalmology and related specialties that blind and partial-sight registration statistics substantially underestimate the extent of visual impairment within our community.

Although there was an increase in the numbers of patients registered as blind or partially sighted in all geographical areas within the United Kingdom during the period studied, this increase was least obvious in Northern Ireland.

There is no reason to assume that the population of Northern Ireland differs from that of the rest of the United Kingdom in the incidence of ocular pathology. It must therefore be assumed that the apparently low incidence of visual handicap in Northern Ireland is misleading and grossly underestimates the extent of the problem within our community.
Registration as blind or partially sighted is particularly important in elderly patients who are often on low income and living alone and have other disabilities including deafness and mobility problems. Registration provides access to benefits and other support services.6, 7, 8

The social services departments which initiate and monitor the registration process are now reorganising, with many areas setting up teams of social workers and rehabilitation workers to deal specifically with the visually impaired. This should facilitate the identification of many more visually handicapped patients within the community. Perhaps our patients in Northern Ireland, particularly in the rural communities, feel that they do not wish to be involved in the bureaucracy or perceived stigma of registration. Alternatively they may consider that a decrease in vision is a normal and acceptable part of the ageing process and thus fail to seek help. Some patients feel that registration is a negative approach to their disability whereas others may consider it to be a form of 'charity'. It is possible that ophthalmologists do not suggest registration to their patients feeling that it indicates a failure on their part to deliver treatment, or that the benefits of partial-sight registration are barely worthwhile. General practitioners also need to be encouraged to identify their visually-handicapped patients, particularly in the older age groups, and acquaint them of the benefits of registration.

CONCLUSIONS

Accurate estimates of the number of blind and partially-sighted patients within our community are required to allow planning of support services for this group in the future.

Each social services area should develop well-staffed teams of social workers and rehabilitation workers dealing specifically with the visually impaired. In the hospital environment the Low Vision Service, which supplies magnifiers and other visual aids, requires expansion and reorganisation to facilitate the provision of low-vision services at peripheral hospitals, as well as at the major ophthalmic units in Northern Ireland. This would obviously improve access for many elderly patients who find travelling difficult. Better liaison needs to be developed between the Low Vision Services within the hospital environment and the social services teams dealing with the visually impaired within the community. The voluntary sector, which also provides extensive services for the visually impaired should be included in this multidisciplinary approach.

If co-ordination between these services can be improved the visually-impaired patients in Northern Ireland would benefit immensely and a much more comprehensive service could be offered to allow them to improve their quality of life and maintain their independence.

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