THE ORTHOPTIST'S ROLE IN REHABILITATION OF THE PARTIALLY SIGHTED

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Abstract
The Orthoptist's role in the Rehabilitation of the partially sighted, at the Royal Blind Society of New South Wales is in the Children's Development Unit, the Sensory Development programme and the Low Vision Clinic, with a specialised Vision Training Programme.

Key words
Rehabilitation, partially sighted, Children's Development Unit, sensory development, vision training, Low Vision Clinic.

During 1979, an Orthoptist has been working in three major fields at the Royal Blind Society of New South Wales. These are in –

The Children's Development Unit, to which an Orthoptist has continued to be seconded from Sydney Eye Hospital.

The Sensory Development Programme, which is designed to assist clients who have recently become blind to make the best use of their other senses.

The Low Vision Clinic, to assist patients to make the best use of their low vision aids and to provide a most exciting Vision Training Programme for patients with macular degeneration.

1. Children's Development Unit

This unit has been previously described by Pardy & Guy[1]. This service has proved extremely beneficial in assessing the amount of residual vision of the pre-school clients. This assists in the structuring of the most suitable education programme for each child.

It has been proved that partially sighted children benefit most from being educated with normally sighted children, if this is possible, at the playgroup, pre-school and school stages. The staff of Children's Development Unit (including the orthoptist) is directly responsible to the Honorary Medical Advisory Panel which consists of several Ophthalmologists, Paediatricians, Psychologists, and an Orthoptist, all of whom plan the most suitable training programme for the child and his family.

If a child cannot manage in a normally sighted learning situation, he may attend the Department of Education North Rocks Central School for Blind Children or the new special school for multi-handicapped children also at North Rocks, or St. Lucy's School for Blind Girls or St. Edmund's School for Boys.

This service is continuing with an Orthoptist seconded from Sydney Eye Hospital (because there are insufficient funds available at present), and the Royal Blind Society is very grateful to Shayne Brown and her staff for continuing to provide this service.

2. Sensory Development Programme

This is the second role of the Orthoptist at the Royal Blind Society, and it is in a programme designed for clients who have recently become blind to make full use of their other senses and thus help them to regain some independence. The aim is to re-direct sensory awareness away from sight and on to other senses, principally hearing and touch, and to learn that these other senses can be a reliable source of acurate information about the environment.

I shall quote a paragraph from a paper written by Sue Thomas[2], the Occupational Therapist in charge of the programme.

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"The first session is introductory. With the help of an Orthoptist, each person explains his visual problem. This is very helpful for me and also helps members understand each other's conditions and the fact that there are many types of impairment. At this time clients are able to ask questions regarding glasses and surgery and, having dealt with these, are more willing to move on to the other senses. We stress the usefulness of remaining vision but explain that, for the purposes of this course, exercises are done with eyes closed to aid concentration.

It is important to note that when we refer to a patient as being blind, we can and often do mean that they are partially sighted, as many 'blind' people have some residual vision.

Following this programme, most patients are then trained in areas of orientation and mobility, activities of daily living, and communications and manual skills, all offered by the Society and tailored to the patients' needs.

The clients who have completed this programme have all shown a marked improvement in confidence and have all performed very well in learning other new skills, once they have become aware of their other senses. Some patients have then participated in the Vision Training Programme as a direct result of their residual vision being observed in this group situation.

3. Low Vision Clinic

This is the third area of participation for the orthoptist and at present is the most challenging. The patients are examined by the Ophthalmologist and low vision aids in the form of magnifiers and telescopes are prescribed, if necessary. Most of the patients need careful instruction in the use of these aids, along with advice as to adequate lighting for each aid. Many of these patients are assisted by the orientation and mobility instructors in the use of these aids, in consultation with the Orthoptist.

The most recent and exciting breakthrough has been in the VISION TRAINING PROGRAMME. This programme was first described by Professors Otto and Bangerter in St. Gall, Switzerland and published in 1971, in which they describe the retraining of patients with macular degeneration to use a paramacular point as their primary point of fixation.

This treatment has been adopted and is now giving some very promising results with patients referred to the Low Vision Clinic. Once the eccentric point of fixation which gives the best visual acuity has been established the patients are encouraged to use this point during everyday tasks with weekly re-inforcement and encouragement by the orthoptist, with special emphasis on the visual angle and visual direction of the eccentric point. After prolonged stimulation, the patients use this point of fixation all the time and it becomes a conditioned reflex with other functioning points of the retina become orientated to it.

It is very important for these patients to realise that we cannot give them the vision they have lost but only reinforce what is left. To date 27 patients have participated in this programme, 3 were rejected after the initial visit as they had central fixation and thus the visual acuity could not be improved. Of the 24 remaining, most have senile macular degeneration, 2 have optic atrophy, 2 have pseudo-xanthoma elasticum and one had problems as a result of rubella. 15 of these had 2/36 or worse visual acuity and now have 2/12 or better, whilst 8 of the others have improved at least by 2 Snellen lines. Two of the patients have actually improved from counting fingers to 2/6 and 2/4.

Not only is this marked improvement in measurable visual acuity most rewarding but the patients' improvement in mobility is astounding. In all cases the patients have remarked on their regained independence, at least with some tasks, such as shopping and cooking. Most patients can now watch television comfortably and many can read N.5 (7 patients), some with the use of magnifying aids and some without.

Case History:

1. M.W., 57 years. Senior executive, department of education. Presented with 2/36 visual acuity in his best eye, with pseudo-xanthoma elasticum, faced with early retirement and having to relinquish his position. After one week of practising the techniques explained to him, visual acuity was 2/5 and N.10 unaided. Mr. W. is now a very relaxed, competent executive who can now read typewritten copy, and thus communicate in board meetings without embarrassment and looks forward to a happy and rewarding retirement on completion of his challenging career.

2. C.L., 79 years. Senile macular degeneration. First visit – counting fingers. Hand Movements. Now 2/6 and N.5 with aid, can watch television, read the Herald each day and look after herself; formerly she had to rely on her daughters even to make her a cup of tea.

This programme has given all the patients a new lease of life. They can re-commence their hobbies and interests and look after themselves without having to rely on relatives and friends. The patients most suited to this programme are older patients with macular degeneration who still have the desire to be as independent as possible.

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