Establishing Low Vision Services at Secondary Level

Hasan Minto
Dip Optom FAAO
Regional Advisor in Low Vision
Haroon Awan
MBChB MMed Ophth
Country Representative

Sight Savers International
House No. 2, Street 10, F-7/3
Islamabad, Pakistan

Introduction

VISION 2020: The Right to Sight has provided a new impetus to the concept of comprehensive eye care encompassing eye health promotion and prevention of blindness, treatment of eye disease and rehabilitation services for people with incurable eye conditions. The hitherto under-developed component of 'low vision', along with services for refractive errors, has been identified as a priority area for intervention. Low vision care provides assistance to those who have some remaining vision, through use of low vision devices, training in the effective use of residual vision, and advice on environment. It also links eye care with education and rehabilitation services to ensure a comprehensive eye care service.

Low vision services can be offered at primary, secondary and tertiary levels. At the primary level, community-based workers identify and refer people with low vision to a higher level of service and advise on environmental modification. At the tertiary level, a team of trained professionals offer advanced care in a specially developed low vision clinic. The critical interface between these two levels is that of secondary, district level low vision care.

Defining the Population for a Secondary Level Service

VISION 2020 recommends planning eye care programmes for a defined unit of population such as a district. In most countries this constitutes the intermediate level administrative unit.[1] The populations of districts may vary considerably from a few hundred thousand to a million or more. For the purposes of this article, an arbitrary population of 0.5 million will be used to estimate the need and structure of service required. It is important to consider population density, geographical coverage and accessibility while planning for low vision services at a district level.

Calculating the Need for a Low Vision Service

The need for a low vision service can be calculated using data from population-based studies such as prevalence of blindness and low vision surveys. If the accurate prevalence of low vision is not known, the number of people with low vision can be estimated by multiplying the number who are blind (vision < 3/60 in the better eye) by a factor of 3. The majority of these would be those with treatable causes such as refractive errors and cataracts. However, there will be those with incurable eye conditions with some residual vision which can be effectivelyutilisedwiththeprovision of low vision care. Such conditions may include retinal degenerations, dystrophies, albinism, and conditions where normal vision may not be achieved even after treatment, such as diabetic retinopathy and glaucoma. Depending on the cataract surgical rate and coverage of refractive services, it is estimated that approximately 20–25% of the total number of visually impaired people may benefit from low vision services.[2]

Components of a Secondary Level Low Vision Service

Low vision care at secondary level is an 'add-on' service where some eye care is already available. The same human resources and infrastructure can be used with some additional training, equipment and a supply of low vision devices.

Human Resources

The possibilities include ophthalmologists, optometrists, refractionists, ophthalmic clinical officers/technicians and nurses. However, identifying who is going to provide low vision care will not only depend on the availability but also on the existing work load and the national VISION 2020 strategies. The cadre selected would need to have some basic clinical skills such as assessment of visual acuity and refraction (objective and subjective). They will require additional training in assessment of visual function, calculation of magnification needs, prescription of low vision devices, and counselling skills to provide guidance on education, vocation and environment. These skills can be taught through the existing training curricula or courses, or specially designed workshops for in-service candidates.

Infrastructure and Equipment

The low vision service is best positioned within an overall national strategy and established in the existing infrastructure using the same consulting room with some extra equipment. The service may initially be provided weekly (5 new and 5 follow-up patients can be examined and assisted in one clinic session). As the patient load increases, the number of clinic days may be increased. A supply of low vision devices will be required, some of which can be produced locally, such as spectacle magnifiers, and some will need to be imported. If the service is established as part of a national VISION 2020 programme, a central low vision devices bank for bulk purchases can be established to meet the needs of secondary clinics. The Low Vision Working Group of VISION 2020 has endorsed a standard list of ophthalmic equipment, vision assessment equipment and low vision devices for tertiary, secondary and primary level clinics (page 8).

Conclusion

For the last 50 years, low vision care has remained in the shadows of conventional eye care. With the growing aging population, newer treatments available for previously untreatable eye diseases, increasing vocational and social demands, and recent developments in making low vision care more accessible and affordable, low vision now seems poised to take a prominent position in comprehensive eye care services.

References

1. Global Initiative for the Elimination of Avoidable Blindness. WHO/PBL/97.61 Rev.1. 1997.
2. Asia Pacific Low Vision Workshop. Report of a Workshop. Hong Kong 28-30 May 2001. WHO/PBL02.87. Available online at http://whqlibdoc.who.int/hq/2002/WHO_PBL_02.87.pdf

Further reading

- Management of Low Vision in Children. Report of a WHO consultation meeting. Bangkok, 23–24 July, 1992. WHO/PBL/93.27.
- Randall T Jose (Ed). Understanding Low Vision. Section I, Chapter 4, The Low Vision Rehabilitation Service. American Foundation for the Blind (New York); 1983. p 61–71.
- *Community Eye Health*, Issue No. 28 Community Based Rehabilitation. 1998; vol 11.
- *Community Eye Health*, Issue No.33 Refractive Errors. 2000; vol 13.
- *Community Eye Health*, Issue No.43 The Role of Optometry in Vision 2020. 2002; vol 15.