

# Management and Planning for Primary Eye Care of the Elderly: the Need to Create Public Awareness of Age-related Cataract in Pakistan

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## Introduction

This article focuses on the significance of management and planning for primary eye care for the population aged 60 and over, in Pakistan. It takes the case of age-related cataract and highlights the importance of creating public awareness about cataract in terms of the respective roles of health planners, policy makers and service providers.

## The Challenges of Managing Elderly Health Care

The highest uses of health services – and most deaths – occur in the older age groups.<sup>1</sup> A number of disabilities are also found in old age. Among the common causes of disabilities are nutritional and dental problems, arthritis and rheumatism, hearing loss, high blood pressure, mental health problems, fractures, cardiovascular, respiratory and digestive disorders – and visual impairment. Management of eye care in the elderly is not simple. Elderly people are usually cautious and conservative.<sup>2</sup> They are vulnerable and take fewer risks regarding treatment, in comparison with the younger population.

**Table 1: Distribution of Eye Conditions**

Total cases	Age-related cataract	Infections	Diabetic retinopathy	Hypertensive Retinopathy	Trauma	Others
100	77	5	3	2	1	11

**Table 2: Age-related Cataract and Economic Status**

Total number of age-related cataract patients	Poor financial status	Satisfactory financial status
77	47	30

## Age-related Cataract in Pakistan

Age-related cataract is the most common cause of blindness in Pakistan. The fact that cataract is treatable makes it vital that the public becomes aware of its nature and potential problems. Doctors are also required to adopt modern approaches and practices regarding the management of this condition. We carried out a study at the Khyber Teaching Hospital, Peshawar, Pakistan to assess the magnitude of the problem and the level of awareness amongst the public and also among doctors themselves. A random sample of 100 patients, aged 60 and above, who visited the eye outpatient department was taken during the months March and April 2001. This study clearly revealed that age-related cataract was the major eye problem of old age in the region (Table 1). It showed that, among the elderly, the incidence of age-related cataract was higher in the poor economic category (Table 2). It also indicated that the elderly population suffering from eye conditions had social and emotional needs, which are equally important for consideration by the service providers.

An informal effort was also made to determine the doctors' approach and awareness and we were surprised by a number of misconceptions about age-related cataract.

## Common Misconceptions

Most of the patients thought that they must wait until the cataract is mature before cataract surgery takes place and if an immature cataract is operated on it will damage the eye. We heard many doctors telling their patients: 'Your cataract is not yet ready for an operation – come after a few months when it is mature enough and



*Hypermature cataract*

*Photo: Murray McGavin*

only then shall we operate on your eye'. This practice has led to practical blindness for many patients, resulting in surgery only when their vision has deteriorated to hand movements or perception of light.

Another misconception is about intraocular lens implantation. To our surprise, there were some patients who thought that the intraocular lens has to be changed every year – which would not be affordable and quite impractical for them.

Yet another group of patients believed that cataract is a contagious disease.

It was also observed that if a member of the family has had failed cataract surgery, the rest of the family strongly believe that such surgery would always result in failure. Some patients said that their father, or mother, had had cataract surgery but there was no improvement in vision. The relatives of these patients, who had developed post-operative endophthalmitis and resultant phthisis, were never ready to be operated on for cataract. Also, when cataract surgery has poor results because of missed underlying eye disease, the general public loses confidence in the surgery.

Some patients find it difficult to practice 'precautionary measures', which according to their beliefs is understood as 'rest as much as possible and for several months'. Some reported that they did not take a bath for a whole month after their surgery, because they believed that the intraocular lens could 'fall down' in the process.

## How to Create Public Awareness

The elderly are normally sensitive and sometimes emotional and not ready to accept new concepts or take risks. Effective public awareness demands very

careful planning and management by the government, NGOs and good service delivery. Campaigns, including effective use of the media, are most important. Traditional practices and beliefs have to be replaced by modern concepts and techniques.

There are good examples of public awareness campaigns in Pakistan that have proved successful, including campaigns relating to iodine deficiency disorders and mass polio vaccination. If age-related cataract is handled in the same way we can anticipate meeting the challenges of Vision 2020: The Right to Sight.<sup>3</sup>

## Comment

There are only a few voluntary organisations which are working for the elderly in

Pakistan. Some are working in the prevention of blindness, irrespective of a particular age group. To align and enhance their efforts, multi-sectoral and inter-sectoral approaches should be adopted; involving communities, Government, the NGOs (operating at national and international levels), voluntary workers and service providers. All must collaborate to create public awareness regarding age-related cataract. To design campaigns regarding such awareness, the role of social science research in addressing the challenges of behavioural and attitudinal changes, motivational and emotional response approaches, and relevant social marketing techniques must not be undermined.<sup>4</sup> The development of multi-disciplinary and inter-disciplinary teams and task groups of

trained community ophthalmologists, service managers, health planners and medical social scientists should be encouraged and established.

## References

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## Abstracts

### A Population Based Eye Survey of Older Adults in Tirunelveli District of South India: Blindness, Cataract Surgery, and Visual Outcomes

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**Aims:** To assess the prevalence of vision impairment, blindness, and cataract surgery and to evaluate visual acuity outcomes after cataract surgery in a south Indian population.

**Methods:** Cluster sampling was used to randomly select a cross sectional sample of people  $\geq 50$  years of age living in the Tirunelveli district of south India. Eligible subjects in 28 clusters were enumerated through a door to door household survey. Visual acuity measurements and ocular examinations were performed at a selected site within each of the clusters in early 2000. The principal cause of visual impairment was identified for eyes with presenting visual acuity  $< 6/18$ . Independent replicate testing for quality assurance monitoring was performed in subjects with reduced vision and in a sample of those with normal vision for six of the study clusters.

**Results:** A total of 5795 people in 3986 households were enumerated and 5411 (93.37%) were examined. The prevalence of presenting and best corrected visual acuity  $\geq 6/18$  in both eyes was 59.4% and 75.7%, respectively. Presenting vision  $< 6/60$  in both eyes (the definition of blindness in India) was found in 11.0%, and in 4.6% with best correction. Presenting blindness was associated with older age, female sex, and illiteracy. Cataract was the principal cause of blindness in at least one eye in 70.6% of blind people. The prevalence of cataract surgery was 11.8% – with an estimated 56.5% of the cataract blind already operated on. Surgical coverage was inversely associated with illiteracy and with female sex in rural areas. Within the cataract operated sample, 31.7% had presenting visual acuity  $\geq 6/18$  in both eyes and 11.8% were  $< 6/60$ ; 40% were bilaterally operated on, with 63% pseudophakic. Presenting vision was  $< 6/60$  in 40.7% of aphakic eyes and in 5.1% of pseudophakic eyes; with best correction the percentages were 17.6% and 3.7%, respectively. Refractive error, including uncorrected

aphakia, was the main cause of visual impairment in cataract operated eyes. Vision  $< 6/18$  was associated with cataract surgery in government, as opposed to that in non-governmental/private facilities. Age, sex, literacy, and area of residence were not predictors of visual outcomes.

**Conclusion:** Treatable blindness, particularly that associated with cataract and refractive error, remains a significant problem among older adults in south Indian populations, especially in females, the illiterate, and those living in rural areas. Further study is needed to better understand why a significant proportion of the cataract blind are not taking advantage of free of charge eye care services offered by the Aravind Eye Hospital and others in the district. While continuing to increase cataract surgical volume to reduce blindness, emphasis must also be placed on improving post-operative visual acuity outcomes.

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### Does Prospective Monitoring Improve Cataract Surgery Outcomes in Africa?

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**Aims:** To determine if prospective monitoring influences cataract surgical outcomes in east Africa.

**Methods:** A prospective observational study of all routine extracapsular cataract extractions with posterior chamber lens implants carried out at Kikuyu Eye Unit, Kenya, between 1 January 1999 and 31 December 1999.

**Results:** Out of 1845 eligible eyes 1800 were included in the study. Two months' follow-up was available in 67.2% of patients. The proportion achieving a good outcome increased steadily from 77.1% in the first quarter to 89.4% in the fourth quar-