

EDITORIAL

Cataract Blindness: A World Health Problem for 20 Million People

Hassan Al Arrayed, MD, FRCS*

Ocular diseases and blindness impose significant cost to government resources and to the society through loss of productivity and the high frequency of related surgical interventions. Cataract is the leading cause of blindness in Bahrain and many other countries and cataract removal is the most common ocular surgical procedure.^{1,2}

In the early 70's, WHO carried out a systematic inventory of the available data on blindness in response to a request from the World Health Assembly. Their survey revealed that 10-15 million people throughout the world were blind.³

In the late 80's, WHO Programmes for the prevention of blindness estimated that 27-40 million persons were classified blind (universally defined as binocular vision of 3/60 or worse).⁴ A further estimate of 50 million people have vision below 6/60 and are defined as partially blind (1% of the world population). Ninety percent of the world's blind population live in developing countries.⁵ In 1989 WHO estimated that a cataract, which is a potentially treatable cause of blindness, affects 17 million people. The regional estimation of the prevalence of blindness reported by WHO was 20.0 million in Asia, 6.0 in Africa, 2.0 in Latin America, 1.5 in Europe and USSR and 0.5 million in North America.⁶ The leading cause was cataract, followed by trachoma and glaucoma. According to the WHO blindness increases dramatically with advanced age. With an increased population growth and life expectancy in developing countries, prevention of blindness becomes an acute and difficult problem to manage.

The number of cataract-blind will grow to between 20 and 42 million by the year 2010, and will become the most frequent cause of blindness.⁶ Cataract blindness may not be a preventable disease, however, it is a treatable disease. What makes it an overwhelming problem is the worsening situation of medical care level, especially in developing countries, due to insufficient and badly distributed health care services, and acute shortage of trained ophthalmic surgeons.

In India, statistics indicate that nearly 80 percent of the elderly have impaired vision; over 75 percent of this is due to significant cataract formation.⁷ According to the health statistics published in Bahrain, we have observed a steady increase in cataract surgeries. In 1980, only 302 cataract operations were performed, while in 1991 this figure rose to 512, an increase of 60%.¹

The data from population-based longitudinal study of randomly selected communities in central India has estimated that a 3.8 million people are blinded by cataract each year. The study projected that about 0.46% of the population are at risk of developing cataract; this is equal to 470 new cataracts/100,000 population/year. The projected estimate for the whole country was 3,811,185 new cases of cataract blindness every year.⁸ At present, approximately 1.2 million cataract extractions are performed in India each year. Bahrain has a

* Consultant and Chairman
Ophthalmology Department
Salmaniya Medical Centre
State of Bahrain

comparatively similar geographical and demographic pattern. As this disease is a degenerative process of aging, with a projected risk of 0.46%;^{8,9} the number of new Bahrain cataract blinds/year, should increase to 2350 persons. The department of ophthalmology at Salmaniya Medical Centre and the private hospitals presently perform approximately 600 cataract surgeries/year, with an estimated addition of 200 surgeries done outside the country. Of the elderly population at risk, only one third receive the necessary medical care (cataract surgery) each year which indicates that there is progressively increasing backlog of patients.

In a retrospective study by Ahmed and Selvyn,² to determine the aetiology and ocular conditions that lead to low vision and blindness in Bahrain, the commonest eye conditions were cataract (52%) and glaucoma (11%). Less common were corneal disease, retinal problems and squint. In a major study of prevalence and aetiology of visual loss in Saudi Arabia, by Tabbara et al,¹⁰ a prevalence of 1.5% was reported with the commonest underlying cause being cataract. Seven percent of all Saudis and 42% of Saudis older than 40 years, have cataract or its sequelae.

It is obvious that cataract-blind prevention is a major health challenge. For us, here in Bahrain, we need to eliminate the backlog and continue strengthening our national programmes for the prevention of blindness. This will require further funding and the need for more trained personnel to make cataract surgery available to all those in need by the year 2000.

REFERENCES

1. Al Arrayed HH. Annual Reports 1980-1990. Department of Ophthalmology, Salmaniya Medical Centre, State of Bahrain.
2. Ahmed AA, Selvyn D. Causes of Low Vision and Blindness in Bahrain. *Bahrain Med Bull* 1988;10:142-4.
3. Thylefors B. Achievements of Global WHO program for the prevention of Blindness during its first decade. *SAPB Newsletter* 1989;12:10.
4. Kupfer C. Second Annual Aziz Memorial Lecture. [Editorial]. *IAPB Newsletter* 1989;12:1-3.
5. Akiva N. Epidemiology of visual impairment and blindness. *Current Opinion in Ophthalmology* 1991;2:733-8.
6. Allen F. World distribution of Blindness. *Community Eye Health* 1988;1:2-3.
7. Thaulasurj RD. Operational Research to reduce the backlog of Cataract Blind. *IAPB Newsletter* 1989;12:5.
8. Minassian DC, Mehra V. 3-8 million Blinded by Cataract: Projections from the first epidemiological study of Incidence of Cataract blindness in India. *Br J Ophthalmol* 1990;74:341-3.
9. Legaro MW. Quality of life and cataracts: A review of patients-centered studies of cataract surgery outcome. *Ophthalmic Surg* 1991;22:431-41.
10. Tabbara KF, Ross-Degnan D. Blindness in Saudi Arabia. *JAMA* 1988;255:3378-84.