

Paediatric Eye Care

CHILDHOOD BLINDNESS

Combating childhood blindness has been identified by the World Bank as the most cost-effective of health interventions. It is considered a priority area in global blindness prevention due to the number of years of blindness that will ensue — devastating families and keeping children from contributing to their communities. "A child's eye is not merely a smaller version of an adult eye" and the causes of childhood blindness are equally different from adult blindness. Hence, the strategies that are effective against adult blindness need to be modified in order to combat blindness in children.

1. MAGNITUDE

- 1.4 million children are needlessly blind(WHO)
- Three quarters of those children live in the poorest regions of Africa and Asia
- Each year almost half a million children go blind — approximately one child every minute.
- Nearly 60 percent of blind children die within a year of losing their sight
- 90% of children who are blind don't go to school
- In developing countries with high under-5 mortality rates, the prevalence of blindness may be as high as 1.5 per 1,000 children — five times higher than the rate found in countries with low under-5 mortality rates.

2. CHALLENGES

- Lack of awareness
- Requires specific management expertise
- Examination and assessment challenging
- Large number of “blind years”
- Un reliable Data
- Lack of Training
- Lack of proper Infrastructure & Equipment
- Absence of Comprehensive service
- Relatively high Cost & Poor Compliance

3. BEST PRACTICES FOR REACHING OUT

Creating awareness in the community: The main stakeholders for awareness creation are the care takers of children which could be parents, family members, community and



the school. The number of “blind years” due to all causes of blindness in children is almost equal to the number of “blind years” due to cataract in adults. The good news on one side is that many of the causes of blindness in children are either preventable or treatable. Moreover, blinding conditions can also cause mortality in children.

- *Health education and promotion:* Causes are different from blindness in adults, and many are preventable at the community level. Eye care programs need to address for better community involvement with programs as the decision makers either parents or family members.
- *Pre-school age awareness -Parents, obstetricians, neonatologists, pediatricians (e.g. under-five clinics):* Major cause of Childhood Blindness in middle income countries is found to be Retinopathy of Prematurity. Studies shows that low birth weight babies usually tend to be seen by different specialists except an ophthalmologist.
- *School age Awareness -Parents, teachers, PHC workers, CBR workers, pediatricians, children*

Service Delivery

- ***Early diagnosis and treatment:*** As the early detection can prevent a child from going blind, it is as much important that the child is seen by an Ophthalmologist as early as possible. For eg: disease such as Amblyopia is irreversible if treatment is delayed.
- ***Availability of HR and infrastructure for a comprehensive paediatric eye care (surgical, refraction and low vision):*** As per International Agency for Preventive of Blindness (IAPB)/WHO guidelines, only paediatric ophthalmologists and anesthetists trained in paediatric eye care initiatives can conduct surgery on their paediatric patients. Further, nurses and supporting staff too need to be trained specially to handle and cater effectively to their young wards. As the examination and assessment are challenging, it requires specific management expertise.
- ***Consider follow-up, distance to pediatric eye care facility, compliance of patients, cultural conditions:*** A study conducted in South India brought out that eye doctors were approached last for eye care, after traditional healers and general physicians.

Finance

- Ensure the development of low-cost, high-quality, low vision devices, which should be widely available, even in low-income countries.

Research: Consider carrying out operational research (epidemiology, economics of pediatric eye care, etc.)

- Both basic and clinical research is vital to support continued improvement in the care of children with eye problems. New information leading to the prevention of eye problems in children is also possible. Tertiary centers should take responsibility for research; the training of trainers for primary - and secondary-level programmes; and for supporting, supervising, motivating, and providing feedback to staff in secondary level centers.

