



# Children and Blindness

A blind child in a developing country faces a lifetime of hardship.

Of the children that lose their sight, more than half will die within a few years of going blind, either from the condition that caused the blindness or from inadequate care as poverty stricken families struggle to look after a disabled child. (C)

Those who survive will have very little education, employment and social opportunities, their families and communities too poor to assist them.

Sighted children of blind parents or relatives are also destined to a life of extreme poverty. Their future is blighted by ill health and poor education as they miss school to care for their blind relative.

Yet much of this hardship can be avoided through simple and inexpensive treatment of the causes of childhood blindness.

## Causes of Childhood Blindness

Childhood blindness refers to a group of diseases and conditions that occur in childhood or early adolescence and result in severe visual impairment or blindness. (A)

Most of the world's blind children live in the poorest regions of Africa and Asia. There, the causes of childhood blindness are largely a result of poverty, malnutrition and a lack of adequate primary health care.

Childhood blindness in developing countries is very often caused by conditions that could be entirely prevented or treated.

## Facts about childhood blindness

- According to the World Health Organization, 1.4 million children under the age of 15 are blind. (A)
- In some developing countries, up to 60% of young children die within one year of going blind. (B)
- The main causes of childhood blindness in developing countries are also related to high child mortality (eg vitamin A deficiency, measles, premature birth). (C)
- Most of the world's blind children live in Asia (1 million) and Africa (300,000). (A)
- Around 40% of childhood blindness can either be prevented or treated. (A)

They include corneal scarring due to vitamin A deficiency and measles infection, cataract, glaucoma, optic atrophy and ophthalmic neonatorum (a severe eye infection in new-born infants) (C)

In other countries such as China, childhood blindness is most often caused by cataract, premature birth, glaucoma and foetal abnormalities (sometimes due to environmental influences or infection).

## Who does it affect?

Most of the world's blind children live in developing countries in Africa and Asia. **(A)**

The prevalence of childhood blindness in developed countries is relatively rare. **(C)**

However, the eye health situation of Indigenous children in remote locations of Australia is more like that of developing countries. Surveys have shown that in some Indigenous schools and communities in north Western Australia the prevalence of trachoma is as high as 60%. **(D)**

## How is it treated?

If childhood blindness is not treated in the early stages of life, it is unlikely to be treatable later.

A child over seven years of age, who has been blind all their life, often won't respond to surgery because their brain's ability to recognise visual stimuli has never been exercised.

Most conditions that cause childhood blindness can be prevented by improving nutrition, sanitation, immunisation and access to child and maternal health services. Treatment depends on the nature of the disease. **(C)**

Corneal scarring caused by vitamin A deficiency, measles and other infections, is the single biggest cause of childhood blindness in developing countries. **(C)** Fortunately, these diseases are entirely preventable through better nutrition, inexpensive vitamin supplements and immunisation.

Just two doses a year of vitamin A supplements is enough to prevent blindness in children. The cost is as little as \$1 per child. **(B)** According to UNICEF, recent programs to address Vitamin A deficiency in developing countries prevented more than 1 million child deaths and blindness in just a two year period. **(A)**

## Sight for siblings in Nepal

Eight year old Hare and his four year old sister Mina did not know what their parents looked like as they were both born with cataract blindness.

It is amazing that the children had survived for so long. They were living in extreme poverty and suffering from malnutrition and chest infections.

Their father was partially blind and their mother needed to work. The children were often left at home to look after themselves.

Fortunately, through The Fred Hollows Foundation, Hare, Mina and their parents were transported to the Tilganga Eye Centre in Kathmandu.

Dr Govinda Paudyal, a Paediatric Ophthalmologist at Tilganga was able to successfully operate on both children.

Both Hare and Mina can now see the faces of their parents. They also have a more promising future as they can go to school and their mother can go to work without fearing for the wellbeing of her children.



**Photo** | Hare Nepali (left) and Mina Nepali (right) experiences the sense of sight after having their bilateral cataracts treated at Tilganga Eye Centre in Nepal. Photo courtesy of The Fred Hollows Foundation.

Cataracts and glaucoma in babies and young children can be treated by specialist eye health services. Some infant cataracts can be prevented by improving maternal health including immunisation against diseases such as rubella.

Trachoma can be prevented by improving sanitation and nutrition. It can be treated by inexpensive antibiotics and surgery

Around 40% of blindness in children is caused by conditions that can be prevented or treated.

(A)

### Restoring sight and hope to children and families

Compelled by his experience and desire to help the needlessly blind, Professor Fred Hollows began his inspirational work to treat cataract in some of the poorest countries in the world. His legacy is The Fred Hollows Foundation.

Over the past 15 years The Foundation has helped restore sight to over 1 million people, including many parents and grandparents.

With their vision restored they are able regain independence, find work, provide for their families and return their children to school.

Often, hospitals and clinics supported by The Foundation perform surgery on children and babies brought in by parents desperate for help and unable to care for a disabled child.

More recently, The Foundation has launched programs that directly target the causes of childhood blindness and vision problems.

In recent years The Foundation has:

- Screened more than 46,000 school children in Vietnam and 1,600 in Cambodia. Free spectacles were given to those with vision problems such as refractive error.
- Provided funds to build a paediatric unit extension at the world renowned Tilganga Eye Centre in Nepal.

### Simila wants to be a doctor

Simila wants to be a doctor. It's a big dream, especially for a ten-year-old girl who lives in a thatch hut ten hours drive from Nairobi in northern Kenya.

By the time Simila entered the world, her mother Rose had lost her sight.

Simila loves school. Her face lights up when she talks about it. "But many days I cannot go. If mum is sick or if she has to go somewhere, I stay home to help her" says Simila.

It's a common story. For every one of the more than 40 million blind people in the developing world, there are usually others, generally children and most often girls, who miss out on education or other life options to care for them. This tragedy is all the greater because 75% of those who are blind can be treated.

Fortunately, Rose and Simila were able to make their way to The Foundation's eye clinic at an isolated district hospital in central northern Kenya. After surgery Rose regained partial sight, enough to restore her independence and enable her to care for herself.

Simila is now able to regularly attend school and can look forward to many more options for her adult life. Who knows, one day, we may see her return to the hospital as one of its doctors!



**Photo** | After Rose's sight restoring cataract operation, her new found independence has opened up a world of opportunity for her daughter. Photo courtesy of The Fred Hollows Foundation.

- Extended the Pakistan program beyond cataract to work directly on childhood blindness.
- Launched the Nakuru Children's Surgery Program in Kenya to provide free eye surgery to children whose families can not afford to pay. More than 200 children have had their sight restored and are now able to see, learn and grow.

## References

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