BLINDNESS IN THE THIRD WORLD

By

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Ever since the dawn of civilization, society has been confronted with the problems of the blind. Treatment meted out to blind people has varied from country to country and from culture to culture. By and large, the world has regarded blindness as something ordained, something inevitable—a divine dispensation to be borne patiently by the victim till he breathes his last. To the wide world at large, blind people are one single category—"The Blind". No one sheds tears for this undesignated vast mass of anonymous humanity. In the words of Sir John Wilson, President of the International Agency for the Prevention of Blindness : "It is only in the statistics that people go blind by millions. Each man goes blind individually in his own predicament". Cold statistics tell us that the world today shelters 16 million sightless people. To the administrator, to the director of an agency for the blind, these statistics are mere figures, but to each individual affected by blindness, it is a life-time of sightless existence. Except for a microscopic minority, mainly in the advanced countries, blindness is a miserable existence.

Strange though it may seem, blindness affecting people in the developed countries is different from that in the developing world. Those in the former category are blind mainly from causes beyond control. By contrast, 75-80% of the blind people in the developing countries owe their blindness to causes which are either preventable or curable. Trachoma, which is both preventable and completely curable if treated in time, affects 400 million people in the developing world. Each year in India, 15,000 children go blind before they reach their sixth birthday as a result of vitamin A and protein deficiency. About five million people are blind from cataract which, incidentally, takes only three minutes to remove by simple surgery.

Twenty-seven-year-old Madhav Rao has been blind since early childhood. Since he was born of rich parents, everything possible was done to restore his sight, but to no purpose. His parents were advised by friends to send Madhav to a school for the blind. "My child is already blind. God has given us enough", said the mother. "Why should Madhav go to school at all ? He should learn music and say prayers". Madhav was keen to go to a school for the blind. But the parents thought otherwise. The principal of the school for the blind was requested to speak to Madhav's parents, but the father, an educated banker, could not be persuaded. So a music master was employed, and Madhav did not enjoy the benefits of allround schooling. Later, he met Krishna, a teacher in a school for the blind. Krishna, despite his blindness, graduated from the university, married a fellow college student and set up his own small family. Today he leads a full life, as against Madhav's boring and limited existence. Many a well-meaning parent, out of sheer ignorance, deprives the handicapped child from receiving education, thus jeopardizing the child's future.

Seven-year-old Shanti became blind, through no fault of her own, when she was one year old. She developed diarrhoea which drained her system of whatever little nourishment she got from a morsel of food composed of bits of bread made out of jawar—a low quality foodgrain, a pinch of salt and some chili powder. No green vegetables and no milk were on her diet. Continual malnutrition caused vitamin A and protein deficiency ; Shanti developed xerosis, and lost her sight. A cupful of green vegetables a day was all that was required to prevent Shanti from becoming blind ! She now lives in a small village in the western Indian state of Gujarat. Her father Ramu Patel, a farm labourer, has a daily income of 25 cents, barely adequate to sustain a family of five. Blindness is a curse in the developing countries—and more so when the victim is a female.

For 10-year-old Islam living in a crowded street of Dacca, life is a little different. His face is impregnated with marks of smallpox, a disease rarely known in the western world in recent times, and this led to his blindness. Islam's father Akbar ekes out a pitiable existence by hawking tit-bits on a busy thoroughfare of Dacca. On a lucky day he brings in an income of four takas (about 50 cents) to feed his family of seven children. Islam's blindness is doubly unfortunate, for if Islam were sighted he would have been a source of additional income to the family. Intelligent and vivacious, Islam pleaded with his father to send him to the school he now regularly attends.

In spite of the overall gloomy picture, instances abound of blind people who have succeeded in overcoming their handicap and have become contributing members of society. For instance, Benjamin teaches in the picturesque town of Kandy in Sri Lanka. He has been fortunate in receiving education at Sri Lanka's oldest school for the blind, going on to university, and earning a university degree which enabled him to get the job of a teacher in a school for the blind. Another instance is that of Gopal, who is employed as a tele-

phone operator in a charitable hospital in Bombay and operates with ease and efficiency the switchboard that he cannot see. B. Boran cultivates a five acre farm in the lovely Otacamand hills in the southern Indian state of Tamil Nadu. He was trained in agricultural and rural pursuits at the Agricultural Centre for the Blind near Bombay. He is one of the 2000 blind farmers trained and resettled with the help of the Royal Commonwealth Society for the Blind. Ramesh Trasi became blind while serving with an airline. The future seemed to him dark and sombre. How would he maintain his wife and children now that he had lost his job ? A friend advised him to go into insurance work. Ramesh has made great headway and now a successful insurance salesmen.

Some blind people have also made their mark in learned professions and vocations. Lal Advani became blind when he was ten years old. Today he holds an important position of a civil servant with the Government of India. Blindness may even strike an opthalmic surgeon. It did so in the case of Dr. R. Krishnaswamy. Undaunted, he took up this challenge, and recently retired after 20 years of service as a successful sales manager with a large pharmaceutical concern. The Braille script, the tape recorder, and now the reading machine have narrowed down the limitations which blindness imposes on people. Blind people have shown that they can become teachers, preachers and professors, scientists, solicitors and judges, administrators and members of parliament.

Work for the blind in the western world started three centuries ago and it follows that blind people there have progressed more in fields of education and employment than in the developing world of Asia, Africa and Latin America. However. there need be no despair for the sightless citizens of the developing world. The march towards progress and prosperity is naturally slow but, thanks to the awakening of interest among governments, the cause of the blind is receiving attention. The World Health Organization, the World Council for the Welfare of the Blind, the Royal Commonwealth Society for the Blind, the International Agency for the Prevention of Blindness and its affiliates are all initiating measures to halt the onset of blindness, and seeking to ensure that the blind are not deprived of their rightful share of human happiness and fulfilment.

Courtesy : W.H.O.

MEN OF VISION

By **Jerome Klein**

It is to the men of many professions living in many different countries during different centuries that we owe our knowledge of that truly miraculous organ : the eye. To mention just a few of them :

Roger Bacon, a thirteenth century English philosopher, was one of the first to study the properties of mirrors and lenses. From these studies came his historic suggestion that certain problems of vision could be overcome by the use of convex lenses, and so it was that spectacles came into use about 1300.

Leonardo da Vinci, the Renaissance Italian artist, made pioneer studies of the eye's anatomy in about 1500, and drew remarkably accurate sketches explaining some of the mechanics of sight.

Rene Descartes, the French philosopher and mathematician, made important contributions to our knowledge of how the eyes function with his findings on the reflection and refraction of light during the seventeenth century.

Sir Isaac Newton, the English physicist discovered the colour spectrum of light and the differential sensitivity of our eyes to different colours.

Benjamin Franklin invented bifocal eyeglasses. These combine two lenses within one frame, the first for seeing nearby objects and the second for viewing objects far away.

Louis Braille lost his sight in a childhood accident but in 1825, when he was only 16, he invented a system by which the blind can read. Still in use today, the Braille System involves a series of small dots, representing letters of the alphabet, that are punched on paper and are read through the fingertips.

Frans Cornelius Donders, a nineteenth, century Dutch ophthalmologist, originated today's basic method of prescribing and fitting eyeglasses.

Hermann, von Helmholtz, invented the ophthalmoscope, a device used to illuminate and examine the interior of the eye. Helmholtz was also the first to measure visual impulses moving along the optic nerve connecting the eye with the brain.

Allvar Gullstrand, a Swedish physician, got Nobel Prize in 1911, for his discoveries on how light is refracted through the eye, whose lens and internal fibres constantly change shape according to the distance from the object seen. Among his many other contributions, Gullstrand invented the slit lamp, improved the ophthalmoscope and devised better ways to locate impaired eye muscles and measure visual acuity.

Ragnar A. Granit, George Wald and Haldan K. Hartline got Nobel Prize in 1967 for their findings on the chemical and physiological processes that enable us to see. They determined, for example, that rays of light cause chemical changes to occur in a pigment found in the retina of the eye, and that these changes tigger nerve impulses, transmitting images of what we see to the brain.

Courtesy : W.H.O.