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Manavseva crusade against childhood blindness

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Entire child-community with an age below 12 in the rural areas of Vidarbha (Maharashtra) will be screened over a period of three years. 10-15% percent of the children may have refractive errors. These children of the age 12 and below will be screened for refractive correction and will be provide with free spectacles after complete check-up. 2-4% of the children may have infection and minor eye ailments. These children will be given treatment, free. 1-2% of the children may require surgical and other Laser Treatments. These children will be given treatment free.

Key word: Blindness, childhood, project, hospital.

INTRODUCTION

The prime objectives of this Project are to prevent and reduce blindness resulting from various disorders in the eye among the children. The specific objectives of the Project are:

Eye Health promotion: Awareness Creation and Public Education

To create awareness in the community on various disorders in the eye among the children in the rural area.

To create awareness among General Physician, Medical Specialists and Ophthalmologists in the rural area on childhood eye diseases.

To create awareness among the School Teachers, Parents, Academicians and Management of Educational Institutions.

Prevention and Treatment

To screen and identify children with eye problems in the rural population under study.

To specifically analyze various eye disorders and provide appropriate treatment.

Making it possible

This enormous project for social health will be made possible with the help of National programme for control of blindness, Indian Medical Association, All India Institute of Medical Sciences, Rajiv Gandhi Foundation and Mau-

lana Abul Kalam Azad Foundation. The driving force stems from each and every person involved in this humanitarian project. The committed staffs which conducts the eye camps, the highly trained and dedicated surgical teams, and the sensitive and caring post-operative staff.

The success of the project and the joy of a person able to see again are of tremendous encouragement, but the true goal of extending this service to every needy person in the country can only be achieved by the involvement of Philanthropists, Industrialists, Financial Institutions, Community-oriented Welfare Organizations and every Public-spirited Citizen. The Project will receive liberal donations from Industrial and Business Houses, Financial Institutions, Foundations, Community-oriented Welfare Organizations and public.

Presently, the Project has been assured the technological co-operation of ORBIS an Organization of All India Institute of Medical Sciences, New Delhi and Department of Public Health, Govt. of Maharashtra (Maharashtra Society for Control of Blindness) in the areas of Pediatric Ophthalmic disorders.

Front-linkages and assistance through satellite has been assured by I.S.R.O. Hyderabad. The Project has the assurance for provision of Teleophthalmology, Telemedicine, Data Transfer, etc. from Medisoft Telemedicine Pvt. Ltd., Ahmedabad and proposed to link up with ISRO.

PROJECT PLAN

Problem identification and project objective link up with

ISRO.

PROJECT PLAN

Problem identification and project objective

There are over 45 million visually impaired persons in the World today, of whom half are in India alone. Nearly 80% of them suffer from preventable blindness. In India, there are several governmental and non-governmental organizations that are taking efforts to prevent and treat blindness. But almost all of them are involved only in Cataract Projects. In India, next to cataract, Childhood blindness is another major eye disease that causes legal blindness.

Though children represent only 1.5 million of the world's 45 million blind, childhood's blindness emerges as one of the important causes of blindness, when measured in terms of the years of blindness. When a child goes blind, it is often a lifetime sentence; equally a matter of significance is that 50% of childhood blindness is avoidable and many a time it goes unnoticed and become irreversible at a later date. In contrast to blindness in the elderly, blindness in the children can mean an entire lifetime of sightlessness.

Moreover, many causes blindness in children, viz. Vitamin A deficiency, Measles, Rubella and Meningitis contribute to child-mortality. These are preventable by Vaccination and other health measures. "The Right to Sight" initiative of the World Health organization (WHO) aims to reduce the global prevalence rate of childhood blindness from 0.75 to 0.4 per 1,000 children by the year 2020.

To reverse this alarming problem in the areas covered by us, we at Manavseva have taken an ambitious Project Manavseva Crusade against Childhood Blindness to tackle the primary causes of childhood blindness.

The diseases that can commonly affect children are:

- i) **Refractory errors:** which can be corrected with spectacles, Experience has shown that this has helped to improve the academic performance of many children suffering from refractive errors.
- ii) **Squint:** eye exercise, spectacle correction or surgery will help to prevent these children from being affected with reversible blindness.
- iii) **Infection:** Proper antibiotic management provides effective prevention from serious complications.
- iv) **Vitamin A deficiency:** It causes night blindness and can ultimately result in irreversible blindness.
- v) **Injuries:** Can cause a whole lot of problems in the eyes. Most of these injuries, if managed promptly and properly, will prevent irreversible blindness.
- vi) **Corneal opacities:** This occurs due to a variety of causes including injuries and infection and can be corrected by Keratoplasty (eye donation).
- vii) **Cataract:** Cataracts can also occur in childhood and can be treated via Intraocular Lens plantation surgery.
- viii) **Glaucoma:** A condition where the Intraocular pres-

sure is raised, this can cause blindness complications and a disfiguring appearance. It can be treated by surgical techniques.

ix) **Congenital dacryocystitis:** Children can have watering of the eyes due to this condition, which can be managed either medically or by surgery.

x) **Genetic diseases:** Running in families can affect children, e.g. Retinitis Pigmentosa with complaints of Night Blindness, Corneal dystrophies, etc.

xi) **Retinopathy of prematurity:** occurs in the children who are born prematurely, especially when excess oxygen is given to them.

PROJECT STRATEGY AND PLAN OF ACTION

The Guiding Light

Manavseva Lokalyan Mahasangh will undertake this Noble Project in association with the help of local Governmental, Voluntary and Social Welfare Organizations functioning in the Project-area under study. However substantial monetary help is required which the Trust is hopeful of getting from Industrial and Business Houses, Philanthropists, Charitable Foundations and Public.

First the various activities of the Project will be carried out only in three blocks of the Nagpur district Rural and Tribal area. After completion, the same will be extended to other parts of the district and rural and tribal parts of Vidarbha.

Activities to achieve the goal

- i) School eye screening camps at villages.
- ii) Special Pediatric eye screening camps at Slums, Orphanages and at other Public places in the villages.
- iii) Publicity and advertisements.
- iv) Health awareness programme.
- v) These activities will be carried out on the routine manner among the people of rural and tribal areas.
- vi) Free Pediatric Outpatient department at proposed Manavseva Crusade Eye Hospital at Nagpur/ Kamptee.

GEOGRAPHICAL AREAS TO BE SERVED

The districts of Vidarbha (Maharashtra) Nagpur, Wardha, Chandrapur, Yawatmal, Gadchiroli, Bhandara, Gondia, Amravati, Akola, Washim, Buldhana.

Project duration: Three years.

Involvement of Manavseva Lokalyan Mahasangh: The Manavseva Lokalyan Mahasangh, has close association with various Governmental and Social Welfare Voluntary Organizations, Foundations and Public aim to bring vision within the reach of the sightless poor by conducting eye camps and providing various surgical and other medical procedures free of cost to the poor.

Free eye screening and iol surgery camps:

- i) Manavseva Lokalyan Mahasangh's Crusade Eye Hospital of 600 beds at Nagpur/ Kamptee with well-equipped Out Patient Department and Operation Theatre complex to perform 100 surgeries per day.
- ii) Manavseva Lokalyan Mahasangh's Crusade Eye Hospital will also have a full-fledged eye bank.
- iii) Manavseva Lokalyan Mahasangh's Crusade Eye Hospital will provide technical, infrastructural and administrative support to the Project.
- iv) Manavseva Lokalyan Mahasangh's Crusade Eye Hospital will have 10 full-time Ophthalmologists, 65 Paramedical and 30 administrative staff to carry out the Project in an effective and efficient manner.
- v) Manavseva Lokalyan Mahasangh's Crusade Eye Hospital will be recognized by National programme for control of Blindness, Rajiv Gandhi Foundation, Maulana Abul Kalam Azad Foundation, IMA, AIIMS and IMC to carry out its SIGHT FIRST programme.
- vi) Manavseva Lokalyan Mahasangh will arrange for a space-capacity of approximately 44,000 Sq.ft. (1 Acre) for the proposed Project.

Project sustainability: This Project will be continued in the successive years with increase target of Maharashtra, Madhya Pradesh and Chattisgarh States with the financial support of Manavseva Lokalyan Mahasangh's Crusade Eye Hospital and generous donations from Public, Charitable Foundations, Industrial and Business Houses.

Project description

Slit lamp: Slit lamp does the magnification of the eyes; it is more essential to have a slit lamp for examining the children. No. of Slit lamp needed for the project: 1

Direct ophthalmoscope: Direct ophthalmoscope is required for visualization of Retina so that we can examine and get the clear idea of the child's visual prognosis. No. of Direct Ophthalmoscope needed for the project: 3

Indirect ophthalmoscope: Indirect ophthalmoscope gives a good binocular vision and stereoscopic vision of the retina. The illumination is brighter and the field of vision is larger. The whole of retina can be visualized clearly with the help of this equipment. No. of Indirect ophthalmoscope needed for the project: 2

Streak retinoscope: Streak retinoscope is required for performing refraction. No. of Streak Retinoscope needed for the project: 3

Auto refractometer: It helps in doing refraction of large volume of children in a shorter period of time. It gives accurate refractive results. Since we are planning the eye examination of children at larger volume, it will be more useful to have an Auto Refract meter. No. of Auto Refract meter needed for the project: 2

Specular microscope: This Instrument captures the image of the endothelium cells and calculates cornea thickness by a unique method that does not require touching the cornea. This patented procedure eliminates the risk of transmitting infectious disease and reduces potential physical injury to the eye. Patient comfort is increased. Because of greater patient co-operation, the examination time is greatly reduced. No. of speculars Microscope needed for the project: 1

Computers with printers: Three Computers with three Printers will be needed for better database management and for analytical purpose of the database. No. of computers with printers needed for the project: 3

Vehicles: Three mini-buses will be needed to carry out the eye screening camps at the rural and remote villages. Children who require treatment at the base hospital will be brought over to the base hospital for treatment and then dropped back to their places by these vehicles.

One Hospital Director's large Jeep (Ten Seater) will be needed along with three Jeeps (Six Seater) will be required for field-work. No. of vehicles needed for the Project: 7