

## **INTERVENTIONS OF EYE SCREENING AND SUPPLY OF SPECTACLES IN SCHOOLS IN TAMIL NADU**

### **Problem Statement**

The school going age is formative for children in determining their physical, intellectual and behavioural development and it is imperative to have good quality eye sight at this phase of life. Currently the prevalence of blindness in India is estimated to be 0.8/1000 among 0 – 15 year children translating to 270,000 blind children in the country. Children also form a major group requiring attention for refractory errors especially myopia. Research has evidenced that prevalence of myopia, astigmatism, high-myopia, and anisometropia significantly increased with increasing age.

To combat this issue the Government of Tamil Nadu launched the School Eye Screening (SES) Program which became an integral part of the National Prevention and Control for Blindness (NPCB) since 1994, after a successful implementation in five pilot districts.

### **Program Description**

In Tamil Nadu, during the regular school inspection process, it was highlighted that many of the refractive error cases are referred to higher institutions for mere provision of spectacles to children. As a consequence, Government of Tamil Nadu has initiated massive program to provide spectacles to all the school students free of cost, who were with the refractive error. In order to gain insights into the nuances of implementing a sensitive program and gain its acceptance among the growing age group of children, and inculcate the habit of wearing spectacles, the program is implemented in three phases. First Phase covered 6<sup>th</sup> Standard. to 8<sup>th</sup> Standard. children in the year 2009-10 and Second Phase, new entrants of 6th Std., 10th and 11th Std. (those in 9th Std. having already received specs in their 8th Std.) with replacement for changes in refractory error or spectacles broken during the year 2010-11. The Third Phase covered new entrants of 6th Std. and with replacement changes in refractory error or spectacles broken.

The planning of SES involves numerous stakeholders such as teachers, health workers and PMOA through a convergence approach. The process involves selecting a Bulk Supplier for spectacles through a tendering process. In each school a teacher usually a woman, is selected and trained for half a day to identify refractory errors using funds from Sarva Shiksha Abiyan (SSA) funds and regular school health fund from DPH.

During the training, teachers are provided with a kit for screening the children in their schools. The teacher's kit contains a six-metre (20 feet) measuring tape, standard vision screening a standard "E" card (6/9 of Snellen's Chart), referral card for children with suspected poor vision, and educational material.

Screening is carried out by the teachers in their respective schools in the presence of a Screening Team and School Medical Team. The process of screening involves that a vision card is placed at a distance of 6 metres. From a distance of six metres, as measured by the tape, the child is shown the vision card. For each eye, child has to indicate the direction of the open end of the "E". By simply

rotating the card, the sequence can be changed. The child indicates the direction correctly (eyesight “good”) or incorrectly (eyesight “not good”). If there is any doubt, the teacher records the eyesight as “not good”.

The School Medical Team verifies the cases identified by teachers and prescribe glasses with duplicate prescription with the student, and they are entered in the on-line order of the approved supply agency and finished spectacles are couriered. Earlier, during screening, students were given choice of the spectacles and were to give their option in the prescription itself. The spectacles received were supplied through the PMOA within a month after the examination.

### Program Impact

The school-wise screening has been taken up for 7, 71,648 children in the 6<sup>th</sup> standard, 7, 86,572 children in 7<sup>th</sup> and 7, 63,622 in 8th Standards during the first semester of 2009. During this process it was noted that nearly 8 – 10% children have refractory errors, more in girls than boys. A total of 163,162 benefited in the Program, out of which 45.14% are boys and 54.86% are girls. High quality specification is made for the material used in the frame production, eye piece, temple, screw, pad arm pipe, nose pad and lens.



### Scalability

This model of convergence among various departments of education and health, meticulous coordination and optimum fund utilization has led to success of this program. With robust planning conducive to the prevailing socio – economic and geographical conditions, this model can be scaled to other states.