# Preferred Practice Guidelines on School Eye Health

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### Introduction

The school eye health program is a health program aimed at improving the eye health of school children. This is important since the ability of a child to learn is said to be dependent on the learning environment provided and the proper functioning of the senses which includes the child's ability to see <sup>1</sup>. This ideally should be integrated into the school health program.

Uncorrected refractive error (URE) is said to be the most common cause of poor vision among school children <sup>2-5</sup>. The World Health Organization (WHO) reported that 43% of all visual impairment is due to uncorrected refractive error, 12 million of whom are children.<sup>6</sup> URE is thus the main driving force for school eye health to forestall the effect of difficulty with reading and doing well in school. The components of school eye health include health promotion through regular health talks, early detection and treatment of minor eye diseases and refractive errors as well as referral of serious conditions.

# Objectives of the School Eye Health Programme

- 1. To detect and correct refractive errors in school children
- 2. To detect and treat eye disorders in school children on-site or through referral to the base hospital

- 3. To promote good eye health and create awareness of childhood blindness among teachers and pupils/students as well as parents
- 4. To empower the teachers to screen the eyes of their school children

### Personnel

- 1. School screening coordinator (can be an ophthalmic nurse)
- 2. The outreach team comprising nurses, resident doctors, optometrists and paediatric ophthalmologist
- 3. The school headmaster/headmistress
- 4. The teachers

# **Planning**

From the onset, obtain permission for the school eye health programme from relevant government agencies (Universal Basic Education Board and Post-Primary School Management Board). Determine the number of schools to be visited per term. Prior to the resumption of the schools, prepare a schedule for the school visits for the entire term. Write formally to the head teachers/principals informing

them of the school eye health programme explaining the objectives to them and requesting for nominations of the teachers to be trained.

A one-day training is organized for the selected teachers. This can be done in groups (e.g. according to education zones- the local government areas are divided into education zones). The details of the training will include basic anatomy of the eye, common childhood eye disorders, common causes of childhood blindness and visual acuity assessment. Each teacher will be equipped with a 6-metre rope, Snellen chart or better still a chart that has only 6/9 Tumbling E optotype and a torchlight. The training should be conducted by an ophthalmologist ("Common eye conditions to watch out for") and optometrist/ophthalmic nurse ("Visual acuity assessment"). One of the schools can be used as the venue. The school screening coordinator maintains contact between the school and the base hospital.

It would also be helpful to obtain information about the common eye disorders that are commonly seen at the base hospital. This would aid in planning for the diagnosis and on-site treatment of the common conditions in the locality. In addition, the training of teachers should lay emphasis on such disorders.

In settings, where school health programmes are already in place, efforts should be made to integrate eye health activities into such programmes. This would enhance the sustainability of school eye health programme. Detailed guidance on the

advocacy and planning of school eye health can be obtained from the Standard guidelines for school eye health issued by International Agency for the Prevention of Blindness (IAPB)<sup>7</sup>

#### **Execution**

The teachers perform initial screening of all children in their schools. They will check monocular visual acuities of all children  $\geq$  5years. The entire chart need not be read, only the 6/9 line is read. A list of all children with visual acuity (VA) < 6/9 in one or both eyes should be compiled. The outreach team on the agreed date will visit the school and reexamine these children with complete Snellen chart. Children confirmed to have VA < 6/9 are referred to the base hospital for comprehensive eye exam and refraction. Children with strabismus, cataract or other major eye disorder should also be referred for comprehensive eye examination. Minor conditions can be treated on site.

Above is the 'some teachers' approach. The alternatives include the 'all teachers' method, where all the teachers are trained and each teacher screens the children in his/her class. There is also the 'students approach' which can be used in secondary schools. Senior students are trained to screen their classmates and juniors.

#### **Basic needs**

1. Visual acuity check corridor

- 2. Snellen's chart/ "E" chart for distance/ Leas Symbols
- 3. Near reading charts
- 4. Occluder
- 5. 6m rope
- 6. Torchlight

## **Monitoring and Evaluation**

Reports should include information on:

- How many children were screened by the teachers?
- How many children were confirmed to have VA <6/9 after examination by the outreach team?
- How many children were treated on site?
- How many children were referred to the base hospital?
- How many children were refracted and given spectacle prescriptions?
- How many children purchase the spectacles?
- How many children came to the base hospital following the referral?

Periodic reports on progress of activities vis a vis the action plan is also needed. Was the number of schools scheduled to be covered within a time frame covered? Three months after the visit by the hospital staff, it will be good to document how many of the children prescribed glasses are actually using them.

To ensure continuity, the newly admitted students during each school session should be screened by the teachers and those who fail the 6/9 line in either eye should be referred to the base hospital. The school eye health coordinator needs to maintain contact with the school authority to remind them to screen the children. A reward for the best performing school/teacher in the screening and referral can keep the teachers motivated. The training for the teachers can also be repeated periodically (e.g. every 3 years) as teachers get transferred from time to time.

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