Primary School Vision Screening Involving Teachers in Nampula, Mozambique.

Aoife Phelan
Technological University Dublin, aoife.phelan@tudublin.ie

Follow this and additional works at: https://arrow.tudublin.ie/scschphycon

Recommended Citation

This work is licensed under a Creative Commons Attribution-Noncommercial-Share Alike 3.0 License.
Primary school vision screening involving teachers in Nampula, Mozambique.


Introduction
Childhood Blindness and Uncorrected Refractive Error are two of the major priorities of the Vision 2020 initiative. Pedestal Eye Health was prioritised in the last national ophthalmology plan for Mozambique; training teachers to identify vision impairment in school children and delivering follow-ups were among the planned activities. There is no current plan for a national child eye care programme or existing human resource infrastructure to address the immediate challenge of child eye health in Mozambique. Some child eye health screening programmes have been carried out sporadically in some provinces; no data from these screenings has been published yet. Furthermore, the prevalence and incidence of refractive error, visual impairment and child blindness in Mozambique is unknown. Visual impairment and blindness in children has devastating personal, developmental, social and economic implications for the child, the family, the community and indeed, the nation. According to Bithalasen at al annual eye health screening in schools is a cost effective method of vision impairment screening.

Aims
This study aims to design, implement and evaluate a simple vision screening protocol performed by teachers, to identify those in need of eye health services, among Mozambique’s children (estimated at over 10 million).

Materials and methods
Setting and Participants
Primary School Screening took place in three schools (urban, suburban and semi-rural) in Nampula, Mozambique in September 2010 (Study 1), March 2011 (Study 2) and March 2012 (Study 3). Due to the volume of children in each school (from 1000) and lack of resources, children with obvious eye abnormalities or children identified by teachers as having eye problems or poor vision were sought out and underwent screening along with a random selection of children. Teachers were selected to perform screening based on willingness to participate.

Study Procedures
Teachers were given a very brief tutorial on how to perform vision screening with the chart (Figure 1(a)). They then performed the test monocularly on the child and indicated if the child could see well with the right eye and left eye (blue arrow Figure 2). The child then underwent the full screening protocol (green arrow Figure 2). The results were recorded on the charts as seen in figure 1(b).

Results
During Study 2 and 3, 268 children had the vision screening performed by 24 teachers who were eager to participate in the study. 17 children had the screening performed by 2 teachers. Of the 223 children screened the teachers identified 174 passes and 49 fails. On further screening (as outlined in Figure 2) 200 of these children were normal, 9 required refraction and 14 required referral for ophthalmological assessment. Further analysis of these results will be done at a later date.

Conclusions
These studies found that there is a cohort of students attending school in Nampula who are in need of eye care service provision. Refractive Error was present among the population tested in these studies but none of the children observed were spectacles. The training received by these teachers was very brief but teachers appear to have an adequate level of education and interest to undertake vision screening in children. The ideal teacher profile for Vision Officers within schools is a trained professional who can be taught the basics of vision screening and eye health through their existing studies. From interviews carried out with school principals, department of health and education and teacher training institutes there seems to be a support for development of a low cost, school based vision and ocular health screening project. Teachers are suitably placed in the community to become advocates for eye care and can encourage students to become aware of eye conditions among their peers and in the community.

This study will inform a provincial pilot teacher screening project for Nampula, which will include the addition of ‘Eye Health’ to teacher training modules as the teacher training institutes in Nampula, as part of a plan to develop a national child eye care programme for Mozambique.

Acknowledgments
Optometry Department of UniLúrio and partners of the Mozambique Eyecare Project mentioned below.

For further information
Please contact info@phelana.org. More information on this and related projects can be obtained at www.mozeyecare.org