SEHRA: School Eye Health Rapid Assessment

A new planning tool for school eye health programmes

Who is involved?

Peek Vision is leading the development of SEHRA. The work is being conducted in collaboration with the International Centre for Eye Health (ICEH) at London School of Hygiene & Tropical Medicine and a global advisory group of leading eye health organisations. The first pilot study is being conducted in partnership with African Eye Institute.

Development and validation of SEHRA has been made possible by the generous support of the American people through the United States Agency for International Development (USAID), Child Blindness Programme (CBP019).

What is SEHRA?

SEHRA stands for School Eye Health Rapid Assessment. It is a new tool which is being developed to aid planning for school eye health programmes.

SEHRA will help the people who plan, implement and monitor school eye health services to gain an accurate understanding of school-going children’s eye health needs in their region and the capacity to meet those needs.

The tool will use rapid sampling methods to provide accurate information about the prevalence of eye health problems in school-going children. This information can be used to plan more efficient school eye health programmes and to inform health campaigns and funding decisions.
A rigorous, evidence-based methodology that will enable rapid, accurate assessment of children’s eye health needs in a given region.

Other elements, such as referral pathways and optical supply chain characteristics, will be added once the first module dealing with magnitude assessment has been validated and tested.

SEHRA is intended to help eye health programmes in low- and middle-income countries become more efficient and better able to meet children’s eye health needs.

The information gathered using SEHRA may also be used to improve eye health awareness, planning and funding decisions.

SEHRA will be a fully digital tool that is part of the Peek Vision eye health platform.

Why is it needed?

Effective school eye health programmes are a critical part of any health system. Addressing eye health problems in childhood can have a powerful positive effect on an individual’s chance of educational success, prosperity and wellbeing.

To plan, fund and implement effective school eye health programmes, health service personnel need to understand the prevalence and characteristics of eye health problems in the populations they serve. This can be surprisingly difficult using existing tools.

While the well-established RAAB survey methodology enables health services to estimate the prevalence of eye health problems in people aged 50 and over, no comparable tool exists for school-going children.

This can lead to inefficiency and increased pressure on eye health services that may already be strained. For example, many school eye health programmes are focused on refractive error, but in some areas this issue is negligible and other issues such as conjunctivitis are much more prevalent.
The first SEHRA pilot study took place in Durban, South Africa in February 2022. The prototype was fully digital and embedded in the Peek eye health platform, so the survey was paperless and results were available in real-time. Working with our partners at African Eye Institute (AEI), we have gained valuable feedback from users and insights into how the prototype tool works in practice. The results will inform the next stage of development and testing.

3 community health workers, 2 optometrists and 1 project coordinator were trained over a single day. Over the following two days, they screened 234 children for eye conditions at Moorton Heights Primary School. All children who required further treatment or examination were referred to appropriate health facilities.

Key outcomes

- The optometrists took longer than expected to complete screening; their feedback indicates that they prefer the community health workers to do the screening. Reinforces the need for team work and task-shifting to occur at all levels.

- 75% of the children referred at screening for non-vision impairing conditions had their diagnosis confirmed by the optometrist. Community health workers gained a high degree of confidence in screening for these conditions as the pilot progressed.

- We included two tests for hyperopia (the plus lens test and near vision check). The plus lens test took significant time for all survey staff to complete and the results were not consistent. Further work will need to assess whether the time cost of using both hyperopia tests is delivering a clear benefit.

- Community health workers were not confident in using the auto-refractor, so it was moved to a separate optometrist-led station. This will need to be addressed in future to ensure that the use of an auto-refractor does not place excessive demands on the optometrist's time.
Next steps

Research and development for SEHRA began in early 2021. We expect the initial development, testing and validation to take approximately two years.

Pilot studies are planned for two locations, with the pilot in South Africa already underway. We are working with our partners to test the prototype tool in existing school eye health programmes, analyse the findings and implement lessons learned into the next stage of development.

Provided the pilot studies are able to proceed as planned and there are no delays due to COVID-19 or other unforeseeable events, we expect the first fully functional version of SEHRA to be available in 2023.

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About Peek

Peek Vision is a social enterprise that powers eye health providers to optimise their services and strengthen health systems. Our software, programme design and data intelligence platform helps NGOs, governments and health services become more efficient, more equitable and more effective.